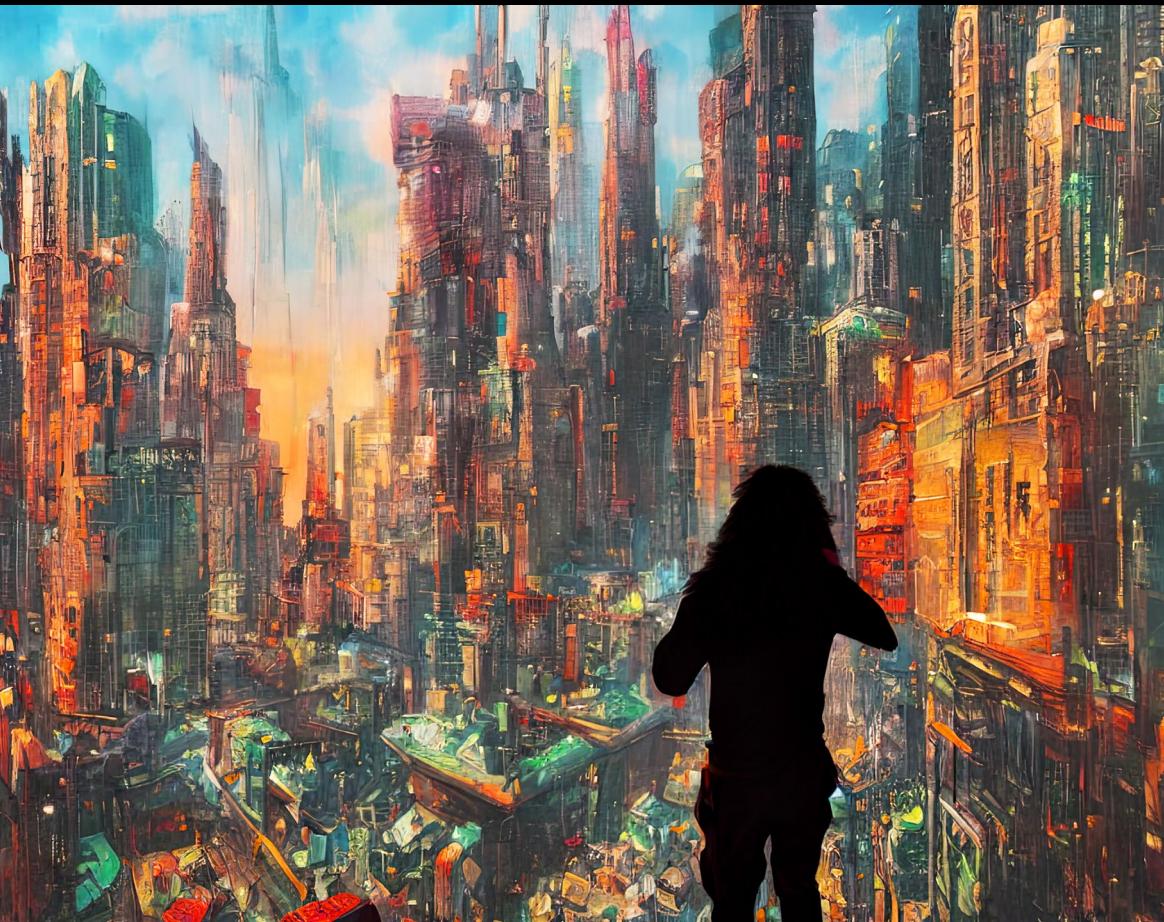


The Walls of Things Around Us

Philosophical (Hi)story of Technology
and Mindfulness of the Human Environment



Antón Bousquet

Mankind began when our ancestors rose on their feet and found ways to occupy their idle hands, crafting tools with stone, wood, or bone, parts of the earth and the bodies of living things. Since that day, men have raced against one another to appropriate nature, exploiting the earth, life, and the skies to edify their world, building up civilization with increasingly complex technologies. These things, our inheritance, now surround us from all parts, and the major portion of our existence is spent either creating or using these things, so pervasive that they form gigantic walls enclosing us, veiling the truth of nature found beyond them. So familiar are these things that most men remain blind to their nature, never having taken the time to investigate them, to see their origin as parts of the earth, life, or the skies, or to notice the grip they exert on mankind. Man thinks that the world around him serves him, protecting him from the dangers of nature, but it equally enslaves him and denies him the ecstatic experience of communion with nature as a whole. Examining the nature of some of the most emblematic things of our world, the present work aims at shedding light upon some of the most influential milestones of the race for the appropriation of nature by mankind, from the use a wooden stick by the first men to the fabrication of rockets allowing man to conquer the depths of the skies.

To see the walls of things around us for what they are is nonetheless only a first step. After examining the nature and origin of some of these things that are part of our daily lives, an invitation to an experience of mindfulness of the role played by these things in our existence is proposed to the reader, intended to lead him to transform his relationship with his surroundings, these walls of things enclosing him since his birth, and guide those yearning to renew their bond with the truth of being, the experience of the whole of nature, veiled by our dependence upon these things made by the hands of our ancestors.

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Abbreviations

Ch. Chapter.

M.y.a. Million years ago.

TBA. Translation by the author.

Abbreviations

Introduction

I have not considered those building brazen ramparts to be inferior to those erecting walls of mud. I do not reject the stairway of conquests allowing man to climb higher, but I have not mistaken the means and the end, the stairway and the temple. It is urgent that a stairway be built so that the temple can be reached, otherwise it will remain deserted, but only the temple matters. It is urgent that man remains and finds out around himself the means to grow, but here, it only concerns the stairway leading to man himself. The soul I will build for him will be a basilica, because only this soul matters.¹

—Antoine de Saint-Exupéry, *Citadelle*

Life grows. Man builds. The world rises. Man is a living creature edifying a world made by his hands, gradually covering the earth, hiding the tree of life, and veiling the skies behind walls of things, driven by a whisper resonating at all times through the very core of his being, unceasingly echoing in his mind, dragging him out of the alluring abyss of idle peacefulness so that he would wage war on all that is not him. Like a blade of grass, he sprouts out of the

1

TBA. French original: “Et ceux qui bâtissent des remparts de bronze, je ne les ai point trouvés inférieurs à ceux qui alignent leurs murs de boue. Je ne refuse point l’escalier des conquêtes qui permet à l’homme de monter plus haut. Mais je n’ai point confondu le moyen et le but, l’escalier et le temple. Il est urgent qu’un escalier permette d’accéder au temple sinon il restera désert. Mais le temple est seul important. Il est urgent que l’homme subsiste et trouve autour de soi les moyens de grandir. Mais il ne s’agit là que de l’escalier qui mène à l’homme. L’âme que je lui bâtirai sera basilique car elle seule est importante.” From: Antoine de Saint-Exupéry, *Oeuvres Complètes II* (Gallimard, 1994), n.p.

ground and strives to reach the highest heavens, turning his countenance toward the mysterious source of radiance profusely showering the land with strength, hope, and knowledge, following the call of his own nature.

Man is nonetheless a very singular creature, a strange branch standing out from the rest of the tree of life, foremost because he is the only being capable of considering the question of the nature of his own being, the only living thing desperately trying to know itself, through the use of reason, and able to listen to the whisper of life, the instincts guiding his behavior and the one of all other forms of life, rather than merely hear and obey it, as he tries to examine the origin of this calling and ponder where does it lead him, and whether or not he should hearken this voice seizing his flesh. He must therefore know himself and know this whisper of life that resonates at the core of his being if he is to appropriate his own nature, taking into his hands his destiny and seeing clearly the truth of being.

To know man is to know what surrounds him, to be familiar with the hidden hands shaping this creature as well as his own creations. It is to feel the presence of the earth beneath his feet and to behold the immensity of the skies above his head, but it is also to know the tree of life out of which he was born, to which he still belongs until his last breath, and this curious world surrounding him from all parts, these lofty walls of things fashioned by his hands or given a name by his reason, and which also profoundly affect his daily life, leaving a deep imprint upon his nature. The consciousness of one's being, one's presence as a part of life caught between earth and sky, a piece of matter waddling through space and time, is what differentiates man from the countless other branches of the tree of life, blind followers of the whisper of life. Such consciousness is nonetheless not innate or universal. It demands to be nurtured and given time to grow, but foremost demands a desire to transcend one's nature as a mere animal, a cell of the tree of life, to become something more, while some are perfectly content with an existence guided by the voice echoing among the branches of the tree, following the instincts engraved in the deepest parts of their body, assuming their part in the great play unfolded by life since its inception: the play of love and war.

Love and war are the two poles whose complementary nature and opposition drive the growth of life, and the union of these poles

is a force allowing life to gradually claim the substance of the earth, found below, and elevate it to the luminous heights above. Already in the Antiquity, the Greek philosopher Empedocles noticed the role of such complementarity between “love” and “strife”:

I shall speak a double tale: at one time they grew to be one alone from many, at another time it grew apart to be many from one. Double is the birth of mortal things, and double the demise; for the confluence of all things begets and destroys the one [generation], while the other in turn, having been nurtured while things were growing apart, fled away. And these things never cease continually alternating, at one time all coming together into one by *Love*, at another time each being borne apart by the enmity of *Strife*. <Thus, inasmuch as they are wont to grow into one from many,> and in turn with the one growing apart they produce many, they are born and they do not enjoy a steadfast life; but inasmuch as they never cease continually alternating, they are ever immobile in the cycle. But come, hear the tales, for learning will increase your wits: for as I said before, announcing the ends of the tales, I shall speak a double tale: at one time they grew to be one alone from many, at another time it grew apart to be many from one: fire, water, earth, and the lofty expanse of air, destructive *Strife* apart from them, balanced in every direction, and *Love* among them, equal in height and width. ²

2

From: Daniel W. Graham, *The Texts of Early Greek Philosophy: The Complete Fragments and Selected Testimonies of the Major Presocratics. Part 1* (Cambridge University Press, 2010), 351 (emphasis added); Original Greek: “δίπλ’ ἐρέω· τοτὲ μὲν γὰρ ἐν ηὐξήθη μόνον εἶναι ἐκ πλεόνων, τοτὲ δ’ ὁῦ διέφυ πλέον’ ἐξ ἐνός εἶναι. δοιὶ δὲ θνητῶν γένεσις, δοιὶ δ’ ἀπόλειψις τὴν μὲν γὰρ πάντων σύνοδος τίκτει τ’ ὄλεκει τε, ἡ δὲ πάλιν διαφυσμένων θρεφθεῖσα διέπτη. καὶ ταῦτ’ ἀλλάσσοντα διαμπερὲς οὐδαμὰ λήγει, ἀλλοτε μὲν Φιλότητι συνερχόμεν’ εἰς ἐν ἀπαντα, ἀλλοτε δ’ αὖ δίχ’ ἔκαστα φορεύμενα Νείκεος ἔχθει. οὕτως ἦι μὲν ἐν ἐκ πλεόνων μεμάθηκε φύεσθαι ἡδέ πάλιν διαφύντος ἐνός πλέον’ ἐκτελέθουσι, τῇ μὲν γίγνονται τε καὶ οὐ σφισιν ἐμπεδος αἰώνιν ἦι δὲ διαλλάσσοντα διαμπερὲς οὐδαμὰ λήγει, ταῦτη δ’ αἰέν ἔασιν ἀκίνητοι κατὰ κύκλον. ἀλλ’ ἄγε μόθων κλῦθι μάθη γάρ τοι φρένας αὐξεῖ ώς γάρ καὶ πρὶν ἔειπα πιφαύσκων πείρατα μόθων, δίπλ’ ἐρέω τοτὲ μὲν γάρ ἐν ηὐξήθη μόνον εἶναι, ἐκ πλεόνων, τοτὲ δ’ ὁῦ διέφυ πλέον’ ἐξ ἐνός εἶναι, πῦρ καὶ ὑδωρ καὶ γαῖα καὶ ἡρός ἀπλετον ὑψος, Νείκος τ’ οὐλόμενον δίχα τῶν, ἀτάλαντον ἀπάντη, καὶ Φιλότης ἐν τοῖσιν, ἵστη μῆκός τε πλάτος τε τὴν σὺ νόφ δέρκευ, μηδ’ ὅμμασιν ἥσο τεθηπώς” from: Graham, *The Texts of Early Greek Philosophy. Part 1.*, 350

Life is a phenomenon, an event, a bewitching of matter rather than a substance itself, with living beings reproducing themselves, as a manifestation of love for themselves or another being, but also relentlessly struggling against one another, waging ruthless wars whose result is the elimination of the unfit, through execution or simply an absence of descendants. Love and war, reproduction and selection, are the pillars of life's evolution, what allows this phenomenon to miraculously perdure through the ages, since the infancy of our planet, and the growth of the majestic tree of life represents a play where each living thing is an actor, playing a part by favoring this evolution, expressing love by obeying the whisper of life inciting this creature to seek to reproduce and extend its own existence through the passing on of its essence to a new generation, and waging wars to trim the weakest shoots of the tree of life, improving the health and strength of the whole.

The great play of love and war that has been unfolded since the first spark of life was kindled in the ocean, when the earth was still a young planet. From a single chain of atoms almost miraculously reproducing itself, as an act of self-love, ensuring its own perpetuation, with love not understood as a romantic infatuation but rather as an answer to the whisper of life calling a part of life to extend its existence through reproduction, the first seed of life grew into a sapling, with its branches becoming more numerous as the heavenly wheels continuously rotated to mark the days, the months, and the years. Soon, a new contrast appeared within several branches, with males differentiated from females, intensifying the play of love and war considerably, as the expression of love for oneself through self-reproduction was completed by expressions of love for other living beings. The emergence of the duality of the sexes, in turn, rekindled the rage leading the living to wage merciless wars against other members of life, and even against the earth and the skies themselves. War more than before became a prerequisite for love. The living need to surpass their peers to find an appropriate mate, fighting for the wealth of nature and to appropriate other parts of life for their sustenance, devouring other creatures, bringing death, to ensure they would themselves remain part of life. Proving their worthiness through combat, they are then welcomed to unite themselves with another living being, mingling their essences to give birth to a new, unique creature, which may prove to be a better actor of the play than any of its ancestors, allowing the tree of life to reach new heights.

From the first long chain of atoms producing almost identical copies of itself eons ago to the animals presently occupying the seas, the dry land, and the air, life has grown into an imposing tree with a myriad of branches, continuing their patient ascension toward the heavens. Life becomes more and more sophisticated and elevated because of the ruthless war waged by every living thing for their survival and reproduction, as those unwilling to participate or the inept actors of the play of love and war are swiftly winnowed away by death and swallowed into the entrails of the earth. Only those hearing the whisper of life inviting living things to assume their part in the play pass on their essence to a new generation, favoring an ever-increasing submission to this call we now often name “instinct.” Like the pied piper of Hamelin, life blindly follows the uncontrollably seductive tune, this mystifying whisper possessing all living things, as those deaf to it ineluctably perish. Its melody pulls life upward, patiently refining it.

Countless acts of love and war thus punctuate the slow unfolding of the great play of life, with the middle realm that it forms slowly gaining prominence, covering the face of the earth and conquering the lower heavens. Plants and algae selflessly collect the radiance of our star and use it to weave earth and air into new parts of life. Fungi feed on the remains of the dead, moistened by the rains or the dew. Animals feast on all branches of the tree, claiming the work of the light-weavers and other creatures as their rightful spoil. All fight for their survival by asserting their presence and securing their sustenance from other living things, and many animals also battle against rivals of their own kind and their own sex to obtain the love of a mate and give birth to descendants. This merciless struggle between the living was at times disturbed by conspicuous interventions of the earth and the sky, such as catastrophic volcanic eruptions or the impact of colossal asteroids scarring the crust of the planet and wiping out entire boughs of life. Another event, perhaps even more catastrophic for the health of the old tree, would nonetheless trigger the beginning of one of the most important events of the (hi)story of life: the rise of man.

The dawn of mankind is shrouded in mystery, but our knowledge of our closest cousins, the primates populating luxuriant forests, and the fruits of our diligent investigation of the faint traces left by our distant ancestors in the ground beneath our feet, have shown us that the event marking the debut of our branch of the tree of life is the freeing of the hands of the first men that occurred when they rose up



Ernest Albert Parkyn, *An Introduction to the Study of Prehistoric Art* (London, Longmans, Green; co., 1915), 100.
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Ernest Albert Parkyn, *An Introduction to the Study of Prehistoric Art* (London, Longmans, Green; co., 1915), 100.

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Figure 1: The Free Hands -Paleolithic engraving in the Altamira cave, Spain.
(
Ernest Albert Parkyn, *An Introduction to the Study of Prehistoric Art* (London, Longmans, Green; co., 1915), 100.
).

from the ground, proudly standing up on their feet, looking at the horizon and at these two hands in front of them, now left idle, no longer needed for the task for which they were initially fashioned, the support of the body, keeping it away from the surface of the earth so that it would escape the planet's omnipresent pull taking everything down and take refuge in the air forming the lower stratum of the heavens, where motion is unhindered and almost effortless.

The idle hands of the standing creatures would soon find things to busy themselves with. They touch the things lying upon the earth, seize and manipulate these things, exploring what use could be made of them. Stone, pieces of wood, or the bones of creatures

having departed from life, these objects soon become tools. The first men discover the versatility of these hands freed by their new posture, offering a considerable increase in the number of stimuli they receive, as they relentlessly investigate the possibilities offered by the manipulation of the earth and life around them. Paired with this increased stimulation of man's intellect, his head now stands in equilibrium upon his neck, somewhat relieved of the pull of the earth, allowing his skull and his brain to grow more voluminous, and his mind to be sharpened by the work of time. This seemingly trivial event in the grand scale of the (hi)story of life on earth would nonetheless prove to be the starting point of a revolution that would, in time, change the face of our planet and mark the beginning of the reign of man upon the earth, life, and the sky.

The play of love and war has been the driving force of life since its inception, guiding its evolution toward an increasing aptitude to resist the unpredictable whims of the skies, the frigid tempests and scorching heatwaves killing entire branches of the grandiose tree, and the staunch assaults of other living creatures striving to get ahead of others in this pitiless game. Mindlessly listening to the whisper of life, the instincts engraved in the innermost parts of their bodies, the long chain of atoms defining their development, the living have no occasion to reflect on the role they play in this game and no willingness to refuse to assume their part in it. The growth of the tree of life guided by the play of love and war is incredibly slow, with the smallest change demanding generations of meticulous selection through war and a great number of new beings engendered through love. Plants, fungi, or animals have no means of transforming their flesh to become more skilled actors in the play, overcoming their rivals and seducing their mates. Endowed with his astute mind and his dexterous hands, man would nonetheless profoundly change this state of things, as he began to supplement what life gave him with the fruits of his work of reflection and his experiences, appropriating the earth, life, and the sky to enhance his body and reign supreme over these three interwoven realms of nature. The rise of man nonetheless represents something more than his climbing of the hierarchy of the tree of life through the use of tools and technology. It is a revolution marking a new step in the evolution of life, with the play of love and war being complemented by a frantic race for the appropriation of nature by man, a race whose pace is considerably faster than the play.

The birth of life occurred when the play of love and war be-

gan, with species slowly evolving as its members father an offspring slightly different from them, with the fittest offered better chances to have descendants than the inept. The great race for the appropriation of nature then began when the insufficiencies of the body could be compensated for by knowledge passed on during one's life rather than through one's blood. A bird possesses the innate knowledge of how to make a nest, and ants can communicate with their peers through the use of secretions used as signals without any learning process. Man is nonetheless different. His remarkable power, triggering the great race for the appropriation of nature that would change the visage of the earth, resides in the fact that he can create at will, without the incredibly slow selection of generations of individuals through the play of love and war. Birds are skillful nest builders because those around us today are the product of millions upon millions of generations of patient selection, weeding out those lacking this crucial skill after the birth of countless birds exhibiting different behavior, each representing an experiment performed by life itself to discover new, useful traits among random changes. Man is different. A single individual can invent and use a new tool, and teach its use to mankind as a whole in a single generation, and there are virtually no limits to the amount and extent of his appropriation of the earth, life, and the skies. This nonetheless does not imply that men would cease to assume their role in the play of love and war because of this unique ability.

The great race for the appropriation of nature indeed occurs on the very stage where the play of love and war is unfolded. Man's body is the fruit of this play, and this body is not a mere tool that would be controlled and used by a metaphysical spirit, but rather the core of his being. He does not "possess" a body, but rather *is* a body, that is, earth, water, light, and air woven together by life itself. Every cell of his flesh, nerves, blood, and bones contains a copy of a book of life, a long chain meticulously recording the discoveries made as the result of the play of love and war, with major milestones of the tree's growth still inscribed in it, and his behavior is deeply influenced by the content of this volume, minuscule in size but colossal in length, written with molecules. The race for the appropriation is itself driven by the play. The relentless pursuit of "technological progress" that it represents is often only a new way to increase man's survival, the length of his days on earth, and a means for individuals to get ahead of their rivals as they strive for resources and mates. Those exploiting the earth, life, and the sky

indeed often do so because they hearken to the melodious whisper of life resonating in their ears, like every other animal, driving all to fight to live and struggle to mingle their essence with the most suitable partner. The uniqueness of the race resides in the fact that the knowledge accumulated by its participants is handed over through tradition rather than reproduction, through learning rather than one's seed, but the driving force of the race is often the same as the one leading every other living being to actively participate in the great play.

The race for the appropriation of nature may be driven by the same force as the play of love and war defining the lives of every part of life, but one of its peculiarities is the outcome of the effort, the work it represents. The play of love and war causes the tree of life to grow, as the interplay between reproduction and selection allows the discovery of new features of life, passed on in the long chains of molecules forming the seed of each new generation. The race leaves few traces on the flesh of man, but the actions performed by those participating to it nonetheless leave profound ones upon nature. Running this race, men edify a world, built with their hands and their minds, transforming the earth, life, and the sky, refining them as an ore in a furnace before turning them into things, tools serving them and their world. The earth beneath their feet is turned into flint blades, clay pots, or iron axes. The life around them is used as food, clothing, or means of transportation, and the air or the light of the sky above them becomes a source of energy and information, exploited by devices and machines such as sailboats, engines, or solar panels. Each generation of participants in this race adds its contribution to this world, passed on as an inheritance to the children of their time. This world thus grows, all around the tree of life itself, surrounding it from all parts, forming walls of things, a citadel that is a rampart against the dangers of the wild beyond its walls, the savage beasts belonging to life, the inclement weather of the sky, or the dampness of the earth. Striving against nature, man thus establish his dominion, and each realm of nature bears increasingly deeper marks of the work of the standing creature, as this world slowly devours the open country, the lands having yet to be shaped by the hand of man.

From the first tool wielded by the hand of man until the technological marvels filling up the world of our time, the (hi)story of our species can then be seen as the running of the race for the appropriation of nature, with each major invention marking a new

milestone having changed our world. Each one of them offered man an edge against the rest of nature, and against other men having yet to obtain these new tools. It brought a steady increase in comfort, together with a decrease in the amount of effort necessary to survive, helping man to quickly rise to the top of the tree of life, exerting his dominion over the entirety of the earth and the sky, supreme master of the world. Following the rise of man and the use of his hands to appropriate nature, a decisive step then was the emergence of spoken language, a form of appropriation of the air to build up parts of his world that are supported by the earth and the sky but whose essence is largely immaterial, made of the products of the mind like words and concepts, purely worldly things. This appropriation of the immaterial world, in turn, considerably enhanced his power of appropriation of nature, as his knowledge could not only be passed on through demonstrations and the learning of manual skills, but it could also be handed over from mouth to ear, and then through manuscripts and books swept by his glance, long series of characters inscribed on the earth. As a result, the walls of things forming man's world not only surround his body, as things made of earth or living things bathed in the heavenly ether, but also fill up his mind, as innumerable words and sentences, ideas and concepts with which he continuously builds up new structures, palaces accessible through language. Increasingly massive, with each generation adding new blocks to it, the world of man nonetheless slowly begins to present some danger to those living a life of seclusion within its lofty walls. The citadel may protect from the threats lying beyond its ramparts, but it may also imprison those born in it, having known nothing else.

Born in the citadel of things, the world built by the hands of his ancestors, man spends his life surrounded from all parts by the products of the imagination and the efforts of his kind. So familiar are the walls of things around him that he fails to see the boundary separating his world from nature, the earth below, the tree of life around him, and the sky above. He is blind to his own nature as well as to the nature of his world, like a fish having never left the sea is blind to the water into which he is plunged. Thinking that he possesses these things forming his world, he is incapable of realizing that they possess him, as he can no longer live away from them, in the wild landscapes of the open country, unable to appropriate the earth, life, and the skies by himself, as he depends on others for his survival. The walls of things make his life comfortable, but

they alienate him from the truth of nature, the truth of being. His horizon is limited by these walls, veiling the incredible extent of the earth and the sky, the vastness of the tree of life, and he thus has developed a mistaken view of himself, thinking that he reigns over nature, whereas it is his world that enjoys this privilege, and this same world rules over him as well. Running the race for the appropriation of nature, he personally enjoys its fruits, benefiting from every discovery or invention created by other participants. Alone, severed from the world and its inhabitants, he is nonetheless largely powerless, even unable to survive for a single year if left on his own in the open country. His ego is puffed up because of his status as a citizen of this citadel of things, but by running the race for the appropriation, striving to further man's domination of the earth, life, and the sky, he acts as a servant of this citadel, this world, without wondering if the benefits it offers him outweigh the alienation from nature and the dependency on this world that it implies.

Living things are first appropriated by life as they assume their role in the play of love and war, sacrificing themselves for the growth and development of this domain of the creation. Man is then appropriated by his world as he frantically runs the race for the appropriation of nature, struggling to edify this vast citadel of things. He is a cog in the machinery of the world, strenuously working to earn his sustenance and pay for the roof over his head, or the goods and services provided by others that he enjoys, in the same manner that he is also an insignificant cell of the colossal tree of life growing between earth and sky, enthralled by its whisper ordering him to strive to survive and reproduce. In both cases, man is a slave to his instincts, to the whisper of life. He is a tool used by something greater than him, whereas the narrowness of his horizon leads him to be proud of his position, mistakenly thinking that the tools he uses only serve his own benefits, while his hands are also used by the world and by life itself for their own purpose, which is mere propagation through time and space, slowly conquering the earth and the sky as they grow in stature and resilience.

Paradoxically, the best weapon used by life and the world to enslave man is his ego. Thinking that he works for himself, achieving greatness by his deeds and the extent of his possessions, his appropriation of the earth, life, the world, and the skies, he does not spare any effort. He relentlessly strives every day of his life to do exactly what life and the world need him to: to assume his role in the play of love and war for the former, and to run the race for the appropri-

ation of nature for the latter. Surrounded from all parts by the walls of things, he fails to see that he lives in a prison, one alienating him from the truth of being, the infinite horizon of the skies, the remarkable richness of the tree of life, and the vastness and beauty of the earth. The focus of his life being the struggle for love and war, he has few occasions to ponder the essence of being, the meaning of his efforts, as his reason is used for the edification of the world and his role in the play rather than contemplation of the whole formed by all that *is*. He appropriates the earth, life, the world, and the skies, but he seldom takes time to appropriate being, thereby remaining blind to the nature of his existence, and the truth of all that *is*. Caught in the hustle and bustle of the world, he cannot see himself, or his world. He uses the myriad of things surrounding him, but he is blind to the truth of their nature, as he is too familiar with them. The higher the walls of things are, the more troublesome it is for him to peer beyond them and behold the whole of nature, which offers a continuous and limpid display of the way of the heavens, the path taken by all that *is*. Man nonetheless early on in his (hi)story perceived that he needed to separate himself from the commotion of his world. Often unable to escape the citadels of stone to seek refuge in the open-country, outside of his world, he felt the need to build up refuges within his man-made cities: temples, places devoted to the consideration of the truth of being, even though he often had troubles keeping the things of his world at their doors, such as “gods” and theology, concepts that find their origin in his world, being created by his mind rather than unmediated reflections of the truth of nature.

As told by the French aviator, quoted at the beginning of this introduction, the temple is what matters within the world. It represents the doorway toward the liberation of man from the yokes inherent to his own nature, a place where silence is imposed with thick blocks of stone opening up a secluded space appearing to stand out of his world. Dimming the blinding lights and muting the noise of the streets, a temple is a place where man is offered a chance to see his own image and an image of his world. Through this experience, he may finally see the nature of his existence, as a creature enslaved by life and by the world, bewitched by the whisper of life compelling him to exhaust his strength for the play of love and war and the running of the great race for the appropriation of nature.

Fortunately, what has enslaved man is also what offers him the means of his liberation. Life made the standing creature its servant,

but the greatest tool it offered him is also the best weapon to break the yoke of life, to mute the irresistible whisper compelling him to strive for the growth of the tree of life. His brain, this formidably vast network of infinitely fine threads forming a maze of nerves, is so efficient at perceiving and fathoming the world that it offers him a chance to see his own nature and his place within nature, allowing him to refuse to obey the call of life, to reject the play of love and war and to pursue his destiny rather than merely serve the middle realm. The world built by the hands of man represents another tool that may be used against its owner as a means of breaking a yoke placed on man's shoulders. The world indeed shapes him from a young age to be its slave, forcing him to spend a large part of his life learning the ways of this realm and how to best serve it, on the benches of a school or at home, training him to run the race for the appropriation of the earth, life, the world, and the skies, tirelessly spending his strengths for the further edification of this realm. The sum of knowledge accumulated in this world may nonetheless also become a weapon that can be wielded against it. Wisdom, the fruit of the lifetimes of reflections of past generations, may show man the path leading out of it. It may show him the nature of the race for the appropriation of nature and point out the true beneficiary of the work of those running it: the world itself rather than individual men. Ceasing to appropriate nature, man may learn to appropriate the race, and the play of love and war, the first steps toward an appropriation of being.

The consciousness of man's predicament as an actor of the play and runner of the race arises as a consequence of the emergence of articulated language, the basis of reason, allowing him to reflect upon the nature of all things and pass on his discoveries to subsequent generations. Armed with reason and language, tools of the world used to enslave as well as to liberate man, he can cure his blindness, finally seeing the paths upon which he is guided by life and the world. Then can an ecstatic liberation be experienced, stepping out of the well-trodden paths, out of the scene of the play of love and war and the track of the race for the appropriation of nature. This ecstasy is not mere contentment. It is an *ek-stasis*, a standing outside, breaking the familiarity of one's environment, a familiarity so pervasive that it caused man to fail to perceive the nature of his surroundings. Like a fish finally jumping out of the water can finally realize the presence and nature of the translucent liquid in which it was plunged, an *ek-stasis* from the race for the appropriation

represents a way to see the work it exerts on man and his world. Dropping his tools, ceasing from laboring for the edification of the world and the appropriation of nature, he can observe those still living with the weight of the world upon their shoulders. He can use his reason to undermine the yoke of the race and the world, refusing to appropriate nature to rather appropriate this mysterious force enslaving his kind, examining the race and its servants as objects, grasping them with his mind, as if possessing them. True ecstasy is nonetheless more than an intellectual investigation, a product of reason. It is foremost an experience, felt with one's senses as much as it is thought of within language and reason, in the depths of one's flesh and bones, seizing one's whole being.

Consciousness is a prerequisite for ecstasy. It is its foundation, built with language, with words assembled like bricks to form monumental structures shedding light upon the earth, life, the world, and the skies. Ecstasy then comes as the result of an experience where a conscious realization is reverberated in man's body, shaking him to his core, transforming his life by shaping his attitude toward being. Ideas rooted in the mind then reverberate throughout the body. They are felt with one's senses, seizing the whole that man forms. Such an experience may be called "mindfulness," a term finding its origin in modern forms of traditional Buddhist meditation techniques but stripped down of its religious connotations. To be mindful is not merely to pay attention to an aspect of our life to which we are usually blind because of its everydayness, its familiarity. It is to let ourselves be transformed by an experience allying mind and body, reason and the senses, deeply changing our relationship with the world around us. We all pay attention to countless things each day of our lives, but few people can reach an ecstasy revealing to them aspects of their lives to which they were previously blind, as they were too close to them. Ecstasy comes by stepping out of one's familiar environment, shaking up what we perceive to be "real," shattering everydayness to let a new picture of the world appear, showing us a previously unseen truth. An endless series of ecstasies may then be experienced, as man continuously falls into new pits of everydayness, getting used to his environment and slowly becoming blind to its most pervasive elements. Shortcuts may be taken to induce an ecstasy, such as taking mind-altering substances, distorting one's perception, but without pulling oneself out of everydayness with one's own will and mind, the resulting ecstasy is only a superficial and temporary one, a mere demonstration

rather than an appropriation. Appropriation of one's being implies knowledge and experience in standing out of such everydayness at will. Then only can true liberation from the various yokes placed on man's shoulders be achieved. Then only can the standing creature break out of the citadel of things keeping it prisoner and appropriate being.

The first ecstasy is the one from the race for the appropriation of the earth, life, the world, and the skies, as it is the easiest to abandon. To run the race is what occupies a major part of the day of most men: they work as cogs in the machinery of the world, turning the wealth of the earth into objects of stone, metal, and plastic. They tend to the tree of life to reap its fruits and nurture the growth of the branches deemed useful, by herding or planting. They shape signs with their mind to enhance the grip of the world over nature and men, and they exploit the air and the light of the heavens, harnessing their strengths to power the inflation of their world. Ceasing from laboring for the world, from participating in the frantic race for the appropriation of nature, man may then step out of this world, beginning to observe the race as a spectator, contemplating its nature. It is by becoming mindful of the nature of his world, a product of the race run since the dawn of his (hi)story, that he may find a way to peer beyond its walls and see what they conceal. To pierce through the walls of things, one must first break the familiarity with the things composing them. One must see the nature of the thing, beyond the use man makes of it, as things belonging to the earth, life, the world, or the skies, and one must see nature in the things around us. When one truly sees the nature of things and nature in all things, the desire to appropriate nature fades away. A realization strikes the heart of man: every single one of the bricks forming the walls of things surrounding him is something that stands between him and the truth of nature, preventing him from appropriating being. Beholding the nature of the walls of things, the citadel formed by man's hands then appears as a prison rather than as a fortress protecting him from the dangers of nature. These walls nonetheless rest on the body of those living within the enclosure they form, and men can cause them to crumble, simply by releasing their grip upon these things around them, ceasing from working and sacrificing their existence for the world.

The present work represents an attempt to guide the reader through a broad examination of the world in which we live, which is a product of the great race for the appropriation of nature that

began after the rise of man, when he started to use the earth to make the first tools. Successively examining each realm of nature, the (hi)story of technology is presented as a philosophical and spiritual investigation of a selection of things, inventions or discoveries, which are still present around us, parts of our lives. These things forming the walls of the citadel in which we were born can indeed not only teach us about the story of the great race having taken place since the rise of man, it can also help us see the nature of these walls, these things, curing the blindness caused by their familiarity, and ultimately allow us to see the truth of nature and the truth of being veiled by these walls. This is why the examination of each one of these things will be followed by a brief invitation to a practice of mindfulness of their nature, meant to transform one's relationship with them, so that nature may be seen in the same manner as one sees the nature of these things, allowing an experience of the unicity of all things with nature, and a deeper experience of the truth of being.

To take a glimpse of the earth, life, and the skies beyond the walls of things forming our world, and to appropriate the great race for the appropriation of nature that began at the dawn of our (hi)story, this is the goal of this humble effort. It may be a first step toward an ecstasy from this race, and the walls of things themselves, a product of it. It may foster a deeper consciousness of the nature of things and a fuller experience of the magnificence of being, through a renewal of one's bond with the earth, life, the world, and the skies, seamlessly forming the whole of all that *is*. Then may one truly appreciate the earth, the realm below our feet, composed of all that can be touched with our skin, the matter of our bodies and all the objects found in our world. Life may then be contemplated as the majestic tree continuously growing since the first seed of life was planted in the sea, when the earth was still young, and which is now composed of a great variety of branches, species having conquered the oceans, the dry land, and the air. The world may then appear as a citadel of things, both a prison and a fortress, shielding us from the dangers of nature while also keeping us from experiencing the truth of being. It may appear as both the man-made environment in which we spend our days and the way our minds see the creation, cutting the whole of the creation into a multitude of things distinct from one another, linked with names created within our languages, arbitrarily dividing the oneness of all that *is* so that we may grasp and manipulate. Finally, the skies may not only be seen as the azure dome towering

over our world, but also as the infinite expanse of space and time, what can be seen but not touched with our fingers. The wheels of the heavens may then appear in all their glory, as they endlessly turn, taking our planet on its continuous journey through the cosmos, with the alternation of the days, months, and years marking the pace of our existence and represented as a wondrous spectacle continuously unfolded in the firmament.

An ecstasy from the race for the appropriation of nature, a race that represents an appropriation of man by his own world, is nonetheless just a beginning. Freed from the race, contemplating the truth of the walls of things forming his world, he may remain an actor of the play of love and war, appropriated by life itself, which uses him as a tool for its own perpetuation and expansion, with the middle realm elevating itself from the depths of the earth and the seas toward the heavens. To achieve liberation from the play of love and war is nonetheless trickier than to free oneself from the race for the appropriation of nature, as the nature of every single branch of the tree of life is tightly intertwined with this play. We are all the products of the play, with our ancestors meticulously selected by life for their ability to be its actors, having heard the whisper calling them to strive for their own survival and to find a suitable mate. Active participation in the play is the most deep-seated instinct of every single living thing, and man is no exception. One may relatively easily refrain from laboring for the edification of the world, from running the race for the appropriation of nature and creating new things, but to abandon one's role in the play of love and war implies the denial of a part of our own nature, as products of this play unfolded since the first seed of life germinated in the ocean. Man may nonetheless appropriate the play without forsaking his nature. He may still strive to remain above the surface of the earth, part of life, and he may still love, without letting himself be controlled by the whisper of life, the instinct commanding him to assume his role in the play directed by life itself. He may depart from the script assigned to him, still wanting to prolong his existence and to find someone to love, but without necessarily doing so to benefit the whole of life, refusing to play by the rules, which are to strive against other beings for the wealth of nature and to reproduce with a mate who is fit to produce an offspring that would efficiently serve the middle realm.

Ecstasy from the play of love and war thus can only occur when man has first appropriated this play, fully perceiving its nature.

Having stepped out of the world, of the walls of things, he needs to step out of himself, out of his body and away from the instincts guiding his behavior. Appropriating his body, through a mindfulness of the nature of every part of it and of the growth of the tree of life having produced this body through the play of love and war, evolution, man may find a way to transform his relationship with his own being, and with being itself, thereby living more intensely the moments granted to him as a part of life, before he gladly lets himself be swallowed by death, returning to the depths of the earth before his substance is utilized for the weaving of new living beings. Guidance on this path may be found in the companion volume to the present work: “The Tree of Life Within Us –Origin and Evolution of Life, Philosophy of Nature, and Mindfulness of the Human Body” (2022).³ Before stepping out of oneself, one must nonetheless first step out of the citadel of things, this world built by our ancestors and now surrounding us, but this attempt to extract oneself from this world should nevertheless not lead us to despise it. On the contrary, it is by breaking out of this citadel of things that may be at times perceived as a prison, beholding it from the outside, that its magnificence and usefulness may finally be seen. The product of the relentless work of past generations is worthy of being honored and cherished, even when one aims to transcend the boundaries it forms, peering beyond its walls. As told by the French aviator, experienced contemplator of the citadels sparsely found in the desert:

I am dealing with a great body, and I do not know, me, what it means to die when I look from the top of my city, as here and there fall the leaves, here and there sprout the buds, and the hard trunk supporting them nonetheless endures. But by these particular woes nothing essential is cheated and you see it, this temple, continuing to be built and this granary continuously being emptied and filled, and this poem embellished, and this curved shoulder of the fountain being polished. But if you separate generations, it is as if you wanted to start man himself anew in the middle of his life and, having erased all that he knew, felt, understood, desired and feared, replaced

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Cf. Antón Bousquet, *The Tree of Life Within Us –Origin and Evolution of Life, Philosophy of Nature, and Mindfulness of the Human Body* (Koadig, 2022), n.p.

this sum of knowledge that became flesh by meager formulas taken from a book, having removed all the sap climbing through the trunk and no longer offering anything to men other than what may be codified. And as speech distorts so that one may grasp, and simplifies in order to teach, and kills in order to understand, they cease to be fed by life itself.⁴

Let us appreciate the dual nature of our world, the walls of things around us, a world that is a fortress as well as a prison, since we now intend to strive to break out of it, going on a journey outside its ramparts so that we may one day gladly, once again, pass its threshold with mirth, returning to the safety of this home protecting us from the wrath of nature and allowing us to perceive all that *is*, conscious of the unicity of the whole of nature, only perceived outside of this world, and of the preciousness of each one of its parts, offered to us by our world, these bricks forming the walls surrounding us from all sides.

4

TBA. French original: “Et j’ai affaire à un grand corps et j’ignore, moi, ce que c’est que mourir quand je regarde du haut de ma cité, car ici et là tombent des feuilles, ici et là naissent des bourgeons et cependant dure le tronc solide à travers. Mais par ces maux particuliers rien d’essentiel n’est lésé et tu le vois, ce temple, continuer de se bâtrer et ce grenier continuer de se déverser et de se remplir, et ce poème d’embellir, et de se lustrer l’épaulement courbe de la fontaine. Mais si tu sépares les générations c’est comme si tu voulais recommencer l’homme lui-même dans le milieu de sa vie et, ayant effacé de lui tout ce qu’il savait, sentait, comprenait, désirait et craignait, remplacer cette somme de connaissances devenues chair par les maigres formules tirées d’un livre, ayant supprimé toute la sève qui montait à travers le tronc et ne transmettant plus rien aux hommes que ce qui est susceptible de se codifier. Et comme la parole fausse pour saisir, et simplifie pour enseigner, et tue pour comprendre, ils cessent d’être alimentés par la vie.” From: Saint-Exupéry, *Oeuvres Complètes II*, n.p.

Chapter 1

Appropriating the Earth

The earth is the home of life, perhaps its only home. This blue planet carried along the way of the skies, in the arms of our galaxy, is also its birthplace, as far as we know. The tree of life sprouted out of the vast expanse of water covering its rugose face, and after eons of growth, mankind emerged as one of its boughs, caught between earth and sky. The earth is also what can be touched, the matter forming all the things around us. The elements used to form most of the objects filling up our world and the bodies of all living creatures were all taken from the realm beneath our feet, extracted from the entrails of the ground to form new things, distinct from the unadulterated earth. The man caught in the frenzy of the race for the appropriation of nature thus sees the earth foremost as a reserve, a storehouse of materials that he can use to edify his world and outshine others in the play of love and war. He strives to rob the place of his origin, his cradle and his tomb, to rise above it, to elevate his world up to the heavens, as if he wanted to leave the oppressive embrace of a parent.

The lower realm indeed constantly pulls down all things whose substance belong to it, as if refusing to let these parts of it go, being stolen by the hands of man and often rendered unrecognizable. Man stands in contrast with it, pulling parts of the earth up, tearing its entrails apart to create something that belongs to him, something that is neither earth nor sky, monuments to the abilities of this creature standing erect, pointing toward the heavens, defying the realm that has given birth to it. The race for the appropriation of nature is thus foremost a rebellion against the earth, an attempt to gain independence from it. The participants in this race nonetheless



often fail to see the truth of the earth. They become blind to their own earthly nature and the fact that without the benevolence of the lower realm, the entire tree of life would simply wither and die. But one must first leave the home to be homesick. One must first depart in order to experience the joy of the return. The path of the race is itself littered with precious insights, which must first be discovered before man can stop from running this race, having seen the earth from the top of the world, and yearning to unite himself with it, body and soul.

1.1 The Stick - Striking with the Earth

Through the ages, the plants covering the land standing out of the ocean have fed the myriad of animals whose ancestors crawled to the dry, rocky surface of the planet from the shallow waters of the coast. The most majestic among these plants, the trees forming the scaffold of the forests, have also given shelter to our ape-like forefathers, protecting them from the scalding heat of the celestial fire with their leaves, and from the cold wetness of the earth by keeping them away from the surface of the soil. As a guiding hand of life, the living pillars also offered the first men their first tools, their own branches, broken under the weight of the creatures holding on to them, torn apart by a lightning bolt shooting down from the highest sky, or simply crumbling on the floor of the forest following the death of these majestic parts of life. This floor is littered with these elongated sticks made of dead wood, severed limbs of the lords of the forests, cadavers of the fallen pillars struck down by old age, by the thunderous rage of the heavens, or by the hand of man. Left for too long on a damp mattress of fallen leaves, the hardness of these branches soon wanes, and they are slowly claimed as a shelter by the insects, molds, and fungi occupying the air, gently flowing under the canopy. Putrefaction eventually leads them to become fully part of the soil in which new generations of trees will take their roots, but in any case, the quenching of the fire of life burning within them makes them depart from the body of life, to once again become part of the earth. One of these new parts of the earth was nonetheless one day destined to become part of man's world, what may have been the very first tool.

Man's appropriation of the earth thus begins with a gift offered by life itself, a living branch reclaimed by death and the earth, a piece of inert matter laying on the face of our wondrous planet. The standing creature, roaming the depths of the forest, its hands finally freed by its posture and now standing, idle, pushed by a feeling of curiosity, seized one of these pieces of dead, desiccated wood littering the floor of his leafy home. Neither too heavy to be lifted up nor too small as to slip through his inexperienced fingers, he brandishes this thing above his head, hesitatingly waving his arm around, swiftly discovering that he can strike what surrounds him without feeling anything other than a shock, reverberating throughout his skeleton. He knows by experience that a blow against the rocky earth or against living things such as the trunk of massive trees with



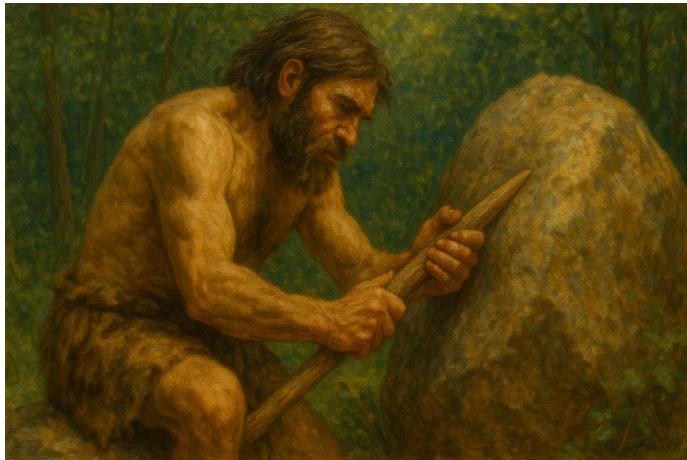
his bare hands would put him at risk of seeing his skin slashed, his precious blood spilled over the ground like a crimson brook, or his bones shattered by the hardness of the things of the earth present all around him. He now realizes that this thing in his hand can endure these offenses in his stead. He can wield this piece of wood and strike the earth and life as he pleases, without his flesh being damaged by these violent encounters. Man has thus discovered his first tool, a mere stick of wood, an action that represents a seemingly unimportant event but nonetheless is the first one taken on the path of the great race that led to the edification of the world that we now inhabit.

Life very early on discovered the power of death, the incomparable strength of what belongs to the earth rather than to life. The hairs, scales, or shells found on countless branches of the tree of life are indeed dead parts of their bodies, devoid of nerves that would relay pain, and whose damaging or destruction rarely threatens the life of the beings to which they are attached. Death is expendable, and thus the earth is used by life as a storehouse of materials that can shield its most vital parts. The hairs on the top of our head are a hat offered to us by life itself, one that is self-renewing, and can be cut off without us feeling the slightest discomfort. The first step in man's race for the appropriation of nature is taken when he is struck with the realization of the expendable nature of the earth, when he sees that the limitations of his own flesh, of his own body, patiently crafted through the play of love and war, can be overcome through the combined use of his wit and his hands. The stick of wood that he brandishes as he walks through the land can become an extension

of himself, simply because of the versatility and agility of these two hands that were freed when he began to adopt a standing or sitting posture. Firmly grasping this tool by closing his fingers, it can not only be carried through his territory but also used to vigorously strike life as well as the earth, the living as well as the dead, without consideration for the damages suffered by this earthly appendix to his hand, as it is simply discarded, thrown back to the ground and replaced when the need arises.

Equipped with his wooden club as a dead extension of his limbs, man sees his position within the hierarchy of life changing. He can now approach large beasts endowed with long teeth and sharpened claws with confidence, without fear of death. An encounter with a predator of a far more robust stature than his would no longer imply an almost certain return to the earth. He can now strike heavy blows at others, men and beasts alike, without risk of breaking his bones while keeping distance from his adversaries, thanks to the elongated nature of his weapon. He bashes the skulls of the men who stand in his way and crushes the skeleton of the wild creatures whose flesh he craves to sustain his body. The stick is nonetheless more than a weapon. It can be used to crack open thick nuts or extend the reach of man's arms or fingers. Waved above his head, it can allow him to hit the fruits hanging on the high branches of the trees, or break pieces of a honeycomb, causing their fall and allowing them to be eaten. Thin twigs can be handled with his nimble fingers to penetrate the nests of insects and extract them for the same purpose. For each particular use, he learns to find a suitable piece of wood lying upon the earth, using the open land as his personal toolbox, there to facilitate his existence and empower him.

The first tool users thus boldly wield pieces of earth to win wars and win love, to survive and to reproduce, to satisfy the needs of their bodies and those of their minds. The earth therefore becomes an ally of man in his relentless struggle against other living things. Its hardness gives him the strength his body lacks, and it protects this fragile envelope of skin and flesh from harm, allowing him to dominate the creatures that do not share his exquisite mastery of earthly tools such as this wooden club. When men collectively realize the power that comes with such an appropriation of a thing of the earth, then does the race between them truly begin. Those who fall behind on this long race extended through the ages will perish or simply be outnumbered, while the most skillful in this work of appropriation will thrive, inheriting the earth and conquering the



tree of life as well as the earth and the sky enfolding it.

The first tool occupies a very peculiar place in the world of man, as contrary to most of the other milestones found on the path of the great race for the appropriation of nature, it has not been shaped by the hand of man from an earthly material, but rather the opposite. If the hands of the standing creature have elongated, agile fingers, ideally suited to firmly grasp things, it is because its ancestors dwelt in trees and were carefully selected by life for their aptitude to use their arms and hands to pass from tree to tree, without the need to step foot on the forest floor, where fierce beasts may attack them. The proportions of these hands, the size of these fingers, were then tailored to fit the size of common branches, and even though they continued to evolve once the tree dwellers ventured beyond the boundaries of the forests and stood up to become men, they remained almost perfectly suited for the wielding of wooden sticks, fallen limbs of the majestic pillars of the forests. It is as if life itself brought our distant ancestors to this emerald home, above the earth and under the canopy, as a preliminary step that would lead them to evolve the skills necessary for them to take part in the great race, where they would no longer merely be carried by the growth of the tree of life, its evolution, but also consciously take part in the play of love and war, taking into their hands the task of making themselves more apt to survive and perpetuate their bloodline. The forest was life's incubator, allowing the development of man, transforming the front paws of his crawling ancestors into versatile and agile hands, endowed with long, dexterous fingers allying precision with strength. Man was thus shaped for the race, passing his discoveries on to the

next generation like a relay, and it is no coincidence if in sporting events this relay is symbolized with a stick, the object that is the most natural for us to hold.

The long arms and dexterous hands of man are the products of the unhurried work of the skies, as they were fashioned by the passing a considerable amount of months and years. They were tailored to allow him to efficiently seize the branches of the trees that sheltered his primate ancestors, who inhabited luxuriant forests. Standing erect, their hands free, the first men then used these agile appendixes to manipulate what would become one of the first tools, wooden sticks lying on the forest floor. One of the first foundation stones wherewith he began to construct our world, the stick still remain present around us, like a relic of the infancy of our species. Taking a brief glance around the rooms of our home or the streets of our city, let us now find the traces of the first sticks used by man. The materials they are made of may vary, but they all share a crucial part of their nature with the branches of the trees that became the first instruments of our ancestors, the first things of the earth that they made their own, firmly grasping them with their hands and using them to act upon their environment. The dreaded baton of the policeman is as simple and efficient as the primitive clubs used by the first men as weapons, and it most closely resembles them in its use, but various other tools, more present in our daily lives, include a part resembling a stick, shaped to fit into our hands and be firmly grasped by them. The handles of our brooms, pans, or hammers are shaped like branches because that is what our hands evolved to seize. On our doors and windows, shorter, thinner ones also represent unconscious imitations of the branches upon which our ape-like forefathers effortlessly swung. We place them in our palms and then firmly clasp our fingers around them, allowing us to control the movement of the thing of the earth to which they are attached, with remarkable ease and precision.

The inconspicuous remnants of the first step in our race for the appropriation of the earth therefore surround us. This first discovery has been passed on from generation to generation, taught from parents to children without interruption, being patiently refined and improved over the ages. We may picture ourselves facing a man attacking us with a wooden club, a baton, or a bat. How helpless, how meek we are with our bare hands to face such a threat, just as

weak as the first creatures that faced such simple and yet remarkably deadly tools, such crude weapons. We often consider ourselves more advanced, wiser, and more civilized than cavemen, but an earthly tool as primitive as a wooden stick would still provide a considerable advantage to the one wielding it, and our existence may still be brought to an early conclusion with a single blow of such instrument. Let us appreciate the power of the earthly things appropriated by our ancestors, as well as by us.

What is earthly is what resists, what is rigid and can be touched with the hands and grasped with our fingers, in contrast with the heavenly, which is ethereal, fluid, and unseizable. To understand the nature of the first earthly tool, a man must experience its earthiness, by himself rather than through the words of another human being. We may therefore take an earthly object such as a stick in our hands, and feel its hardness. Let us experience how considerably more unyielding and inflexible it is compared to the limb made of flesh and blood that holds it. There lies the strength of the earth, a force that can be used to extinguish life as well as to protect it.

Made ours by our forest-dwelling ancestors, the serene power of the earth is now firmly held in our agile hands, offered to us as our irrevocable birthright. Let us witness a manifestation of this ancient power, by using the earthly object now found in our hand to vigorously crush another thing belonging to the lower realm, one that would not yield to energetic blows of our bare fists or the pressure of our fingertips. Let us utterly reduce to dust or completely flatten something that stands out of the seemingly planar face of the earth, seeing how our primitive tool breaks it apart, deforms or shatters it, showing us the arcane strength of the earth, surpassing our own vigor, and which we now have learned to appropriate so that it would unconditionally submit to our will. This power is now indubitably ours, and we are so used to wielding it that we have grown blind to its presence. Each time we employ this mysterious strength of the earth, we may remember its origin, and how our forefathers made it our eternal possession. Either using a hammer to forcibly insert one thing into another, to drive a wedge between them, or to tear them apart, let us be aware of the nature of the force allowing us to perform these actions, altering the earth and building up our world, and we may imagine how would we live if we were deprived of the opportunity of using the things of the earth in such a manner.

Finally, let us notice the capacity of tools to extend the reach of

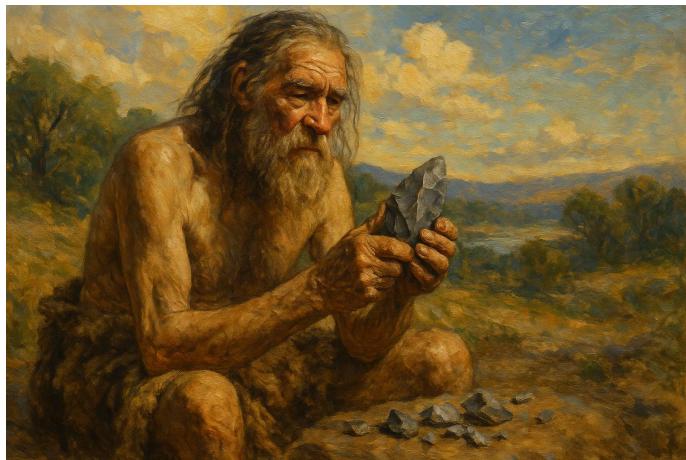
our limbs, becoming extensions of our bodies. Holding an elongated stick by one extremity and waving it around with care and attention, we can see how this tool allows us to topple other things that would otherwise be out of the reach of our hands. Made one with our flesh, the earthly thing prolongs our arms, and enlarges our body. We can now reach objects inaccessible to the barehanded, giving us an advantage over them if we were to compete for their possession. Seizing the most minute kind of stick, such as a toothpick, spaces too small for being explored with our stubby fingers now become accessible, this time not employing the earth for its strength alone, but also for the fact that the earth is replete with things of all shapes and sizes, which can be chosen or made to fit the use we envision for them. May we grow in awareness of the remarkable versatility of the substance of our planet, both so rigid at times and so malleable at others, as the tools we create from it become part of us and of our world, considerably enhancing the already remarkably abilities of this body, graciously offered to us by life.

1.2 The Blade - Cutting with the Earth

Man's first step in the race for the appropriation of the earth kindled his insatiable appetite for power, as some men saw the life of the masters of the first tools being transformed, elevating their status among all the living things enfolding the earth. This first step also showed man that the appropriation of the earth can make his existence more comfortable, sparing him efforts and facilitating the tasks pacing his daily life, such as the securing of his sustenance. His interest in the earth therefore grew, as his land slowly came to be seen as a giant reserve from which useful things may be obtained, extracted, robbed. His curiosity was aroused by all these things littering the various landscapes that he explored as he assumed his role in the great play of love and war, stimulating the growth of the tree of life to which he belongs, like any other creature. The first kind of tool that he appropriated was dead wood, life reclaimed by death and the earth, because this is what his hands were created to handle. Now, man comes to discover the soil under his feet, the rocky crust of the planet upon which he stands.

The commotion of the molten magma forming the fiery core of the earth leads to a slow but continuous grinding and crushing of the rocky crust, while the torrential rains patiently carve deep canyons in its surface, which are also polished by the winds laden with their burden of dust. The work of the earth and the sky upon this crust causes many parts of it to crumble into what may appear as fine grains of sand on the scale of the planet, but represent large chunks of stone to the eyes of man. Crushed and carried by currents of magma or rivers of water, stones of all kinds are thus scattered across the dry land, and man continuously stumbles upon these gifts of the earth, which have deeply changed the life of his kind. Taking some of these rocks into his hands, manipulating them, attentively observing them with his eyes, and touching them with his nimble fingers, he discovers their nature, and envisions what use could be made of them.

The rock shares with the wooden stick a hardness contrasting with the soft bodies given to most animals, but pressing or scratching one against the other, man soon sees that the wood almost invariably yields to the rock. Rocks almost always possess sharper edges, especially when freshly broken, and these edges can be used in ways the wooden stick cannot. As will be the case with many



other steps of man's race for the appropriation of nature, the uses of the earth that our kind discovers with its wit were already discovered by life itself ages before, through the effect of the play of love and war, better known as "natural selection." The hardened, sharp appendixes present on the body of many animals indeed represent ways by which life uses the hardness of the earth in the same way as a pointy rock can be used: as teeth, horns, or claws, used to pierce, tear, or lacerate. As was the case with the first wooden tool, man's appropriation of these rocks, parts of the earth, nonetheless can grant him new powers and offer him new benefits in his life.

The heavy, pointy, and sharp nature of certain of the rocks found by man on the ground, carefully selected by him, allows him to relieve his own body parts of certain actions that may be damaging to his flesh. Instead of crushing the shell of a nut with his teeth, he can simply crush it between two flat rocks. Instead of painstakingly tearing up a carcass with his fingers, he can cut large chunks of it with the sharp edge of one of these gifts of the earth found lying on the ground. What life has denied him, he can also build using the earth, creating new extensions of his body, compensating for what he lacks, such as horns or claws. He can now also attach one of these pointy rocks to a stick so that it would effortlessly pierce the skin of a prey, mimicking the horns of a bull or a deer, with the supplementary advantage that, contrary to a body part, this tool can be easily replaced, and its destruction or loss would not threaten his life.

The beginning of the true appropriation of the rocky earth, defining the new era now commonly known as the "stone age,"

nonetheless only came when our forebears learned not only to make use of the stones they found upon the earth, but also learned to fashion them into a wide array of tools helping them in their daily struggle for love and war. This occurred when they stumbled upon specific kinds of stones, chert and flint in particular, which possess the peculiarity of regularly forming long, very sharp shards when violently struck. These stones, appearing as earthly as any other part of the crust of our planet, nonetheless represent a gift of some of the humblest and most ancient forms of life. Flint and chert indeed represent crystallized forms of silica, remnants of the shells and skeletons of minute marine creatures that populated the oceans when the tree of life was just a young shoot. Petrified by the work of the skies, these corpses of our distant cousins then became the reserve of material from which some of the most important tools of man's history were made, without him suspecting their origin, as they are now almost indistinguishable from the rest of the great body of the earth.

By hurling earth against earth, men can produce blades of stone sharper than the sharpest teeth, greater than those of the fiercest predator, and these can be used by the weakest member of their species, even a child, to attack or protect life, to carve or to dig the earth, empowering all men and narrowing the gap between those endowed by life with great bodily strength and those who have not, and favoring the most skillful handler of these earthly tools.

Using a thick but short wooden stick, whose greater softness somewhat dampens the blows of his hand and prevents catastrophic breakage, man learned to control the way blocks of flint can be used to create shards and blades. With blows precisely applied on certain parts of a large shard, he developed a technique to successively break little pieces, discarding minute flakes to further sharpen his tool and extend the size of its edge. As a result, a wide variety of tools could then be produced, each one adapted for a particular use, and for the first time bearing the mark of the hands that produced them. Indeed, the wooden sticks of the first men all have been reclaimed by the earth, leaving no trace of their nature as tools, but now, these meticulously fashioned pieces of flint are immediately identifiable as earthly things made by man alone, and a great number of them, coming from the dawn of mankind, have passed through the ages buried in the soil, before being unearthed by our contemporaries and claimed as our inheritance, presented behind protective glass in our finest museums, a sign of one of the earliest earthly foundation

of our world, a relay stick of the great race for the appropriation of the earth.

Thus was the blade discovered by man, and by attentively observing its nature, he then uncovered the various uses that could be made of this novel instrument. The thin edge of the blade points toward the infinitely small, the horizon of the minuscule, contrasting with the thick center part. This contrast is necessary, as the thick, blunt body of the tool gives it its weight, its durability, and its ability to be handled easily by the hand of man, while the thin, sharp edge gives the tool its capacity to cut, to separate, to tear apart what was woven by life or formed by the earth. Pressed against a part of the earth or the body of a living creature, accompanied by a movement of the hand, the blade drives a wedge between bits of matter. It splits the bonds between substances and elements forming an earthly object, with its tip sliding between them and the penetration of the blade then enlarging the distance separating them. What is one can be cut into parts, whose boundaries are decided by the one wielding this tool made of earth. What the earth or life has gathered, woven into intricate structures, can now be cleanly and relatively effortlessly dismantled, cut into pieces with a movement of one hand. Touching a blade, man can see it slash his own skin, cutting open the vessel formed by his body, filled with blood, and observe the liquid of life staining his fingers with a crimson tint, showing him the power that his tools exert upon life. The body of most creatures is a finely tuned piece of machinery, and the intrusion of the blade in many vital parts of it would cause this piece of machinery to swiftly crumble, and the fire of life burning within this being to be extinguished. The blade is a very efficient tool to turn life into death. Its discovery can be seen as a trick used by the earth itself, as the lower realm offers man these blocks of flint, part of its body, to be shaped into blades, but man will use them mostly to strive against other branches of the tree of life, rather than against the earth or the sky, and most of the living things killed by these earthly blades will then ultimately be reclaimed by the earth, as if the earth itself used man as a servant, while he is convinced of using the earth to foster life. Both viewpoints may nonetheless be complementary, as man indeed gains a considerable advantage over the other branches of the tree of life because of his use of stone blades. All men will nonetheless not have the same relationship with this invention.

All equipped with the same hand, ideally suited to the wield-

ing of wooden sticks, the first men certainly all equally shared their capacity to use these first tools. This would nonetheless not necessarily have been the case with the stone blades. They indeed demand skills and knowledge to create, which may be treated as a wealth to be jealously guarded, an advantage that should not be shared with other, who are competitors in the play of love and war, racing against them for the appropriation of the earth. With the emergence of these tools comes the emergence of the value of earthly objects and worldly knowledge. To possess the most efficient tool may lead a man to prevail in combat against another, or lead him to catch more prey for himself and his clan, and this may, in turn, lead to more prestige among his people and to the ability to gain the love or the flesh of the most coveted members of the opposite sex to produce an offspring. The tool thus begins to occupy a greater place in the play of love and war guiding the existence of most of mankind. This new step of the great race thus favors a fiercer competition between men, and between men and other branches of life. Those who fall behind in this race are soon replaced by the forerunners, who are more apt at surviving and fathering children, as they pass on their knowledge and teach their skills to those they chose, slowly building up their world generation after generation, with things of the earth like stone blades and things of the world like the knowledge of how to make them.

The impact made by this invention is wide and deep. It reaches the most remote territories and left its mark on the major part of the history of our branch of life, until the present day, and undoubtedly until our end. It certainly led to a surge in violence among men and between men and other parts of life, as the power of the blade kindled man's thirst for blood and his lust for power. Rivers of blood certainly began to water the dry land as a result of this discovery, as man could easily slit another's throat or slash the flesh of the largest beasts roaming the plains of his homeland. Elongated blades were used to butcher the products of a hunt, while scrappers helped him to remove the fur covering hides. Stone razors could be used to shave hairs or scar skin to mark a belonging to a clan. Rage, which was necessary to kill and butcher with bare hands, can now be replaced by a calm composure, with precise movement and fewer effort demanded. The power of the blade supplements the one of man, who now needs less strength of the body to efficiently take part in the play of love and war, but more skills and knowledge to obtain such earthly tools, demonstrating a capacity to appropriate

the earth.

A blade is a tool that also endows the one wielding it with the power to shape new tools with it. The edge of the stone can indeed be used to sharpen the tip of a wooden stick, transforming it into a spear, able to deeply pierce the skin of a prey or a fellow man. It can also be used to carve wood, for all kinds of purposes, as the wood easily yields to the superior hardness and sharp nature of the blade. The gifts seemingly bountifully offered by the earth nonetheless often also come with a price to pay. Enticed by the wealth found in the ground, man soon finds himself bound to the soil from which he extracts the source of his new powers. Unknowingly growing dependent on these blades of chert and flint, he indeed is condemned to remain close to the places where these stones can be found in abundance. The earth becomes his coffer of material, his possession and treasure-house, as he has now learned to appropriate the ground beneath his feet, but this possession leads him to himself become chained to this land, now seeing it as a pile of things that can be used by his hands, but blind to the way he may let himself be used by the earth, by death, against life itself, spilling blood, spreading death and favoring returns to the earth, rather than fostering the growth and strengthening of the majestic tree of life. This second step of man's race for the appropriation of the earth may be the one that most profoundly changed his existence, but also the one that initiated the greatest wave of destruction of life, from the dawn of our kind until the present day.

As a versatile tool used to make other things, the blade led to a considerable inflation of man's world. These sharp stones born out of the crust of the planet were used to build new things, made of wood or bone, things of the earth that became part of man's life, that were passed on from hand to hand, from generation to generation, from land to land. Man made the earth his possession, and made new things with its wealth, things whose substance remains earthly, but whose use and usefulness make them something more than mere pieces of earth. They are rather things also belonging to his world, linked with a knowledge that is only found within his own personal world. But this is still only the beginning of the race for the appropriation of nature that defined the history of our kind.

Made of the elusive wealth of the ground, blades have accompanied man during most of his glorious and bloody (hi)story. Their

shape and size now vary considerably, and steel has replaced flint as the earthly source from which they are fashioned, but they are still very conspicuously present in our homes, in our lives, almost as much as they were during the "Stone Age." Taking one of these sharp instruments of death and life, representing one of the earliest and most impactful steps taken by man during his frenzied race for the conquest of the earth, we may now gently feel the edge of its blade with our fingertips, pressing it softly against our naked skin, witnessing the stark contrast between the unyielding nature of the earth and the considerable malleability, the plasticity of our living flesh. Pressing more vigorously, we heed the warning call of the wiry sensors pervading our flesh, telling us that our skin is about to be damaged, part of it cut by the infinitely small edge that begins to drive a wedge between some of the cells forming the wineskin-like envelope preventing the spilling of our blood, crimson sap of the tree of life. We thus feel the discreet power of the blade upon life, and become aware of its tight bond with death, with the dark earth from which it was made, and into which it can bring us as well.

We may now examine the crucial place occupied by blades in our lives. The hair upon our head are regularly cut by some, and so are the nails at the tip of our fingers and toes, themselves the relics of distant resin-like blades of life made to slash the flesh of other creatures or dig the ground. We may imagine what our neatly groomed faces would look like without the use of this discovery of our most distant ancestors, used to conscientiously trim the ever-growing but lifeless parts of our bodies. The most common use of such earthly tools nonetheless remains linked with our food. Heavy butchering knives allow us to cut large chunks of meat, fish, fruits, or vegetables into small pieces that can more easily be cooked. Smaller ones are employed to cut them further so that they may be placed into our hungry mouths and satiate our voracious appetite. We can feel the bodies of former parts of life beings sliced with a slight movement of our arm, the sharp edge deeply penetrating flesh and separating it on the two sides of the blade. We may now ask ourselves how would we satisfy the hunger of our body crying for its daily sustenance without such tools made with the heaviest essence of the earth? Condemned to use our bare hands and our fragile, nacreous teeth, how strenuous would this crucial part of our existence be? These deadly utensils, discovered by our fathers and now made by those among our brethren who received the abstruse knowledge of their inventions as their inheritance, spare us many efforts as we feed

ourselves each day of our lives. These formidable instruments allow us to elegantly and efficiently prepare or eat our food, with precise and swift movements.

The place presently occupied by the blade in our world is nonetheless not limited to the use we personally make of them. Taking a glance around where we are now, we may examine the barely noticeable traces left by the blades employed by the artisans who crafted the earthly objects surrounding us. The bulky pieces of furniture made of wood forming the frame of our quarters certainly encountered the sharp edge of a blade before they took their present shape, and so did most of our inner doors. Closer to our flesh, the intricately woven pieces of fabric from which the garments we are now wearing were made most likely also were trimmed with several blades before they were finally sewn together to allow us to retain our precious warmth from the assaults of the winds the bitter coldness of the soil, and to veil our nakedness from the privy eyes of the indiscreet. We should be eternally grateful for the wondrous discovery of our forefathers, who ages ago struggled to appropriate the earth whereon they stood. They shaped it into versatile tools that allowed them to fashion the earth and life to a new extent, as they also laboriously passed on the invaluable, worldly knowledge they acquired from generation to generation, until the present day, thereby greatly facilitating our lives. Furthermore, we may also reflect on whether this easier life necessarily implies greater happiness, greater fulfillment, or simply a greater advantage in the great play of love and war. A medicine benevolently offered to someone afflicted with a sickness may indeed poison, if improperly used by someone else.

1.3 The Hearth -Igniting the Earth

The tree of life takes root in the earth, but its survival also heavily relies upon the radiance poured down daily by the sun to grow.¹ Without this celestial fountainhead of brilliance, our planet would likely be a barren wasteland, covered with a thick mantle of ice. Life needs this flow of energy raining down from our star to perdure and flourish, not only as the light that illuminates our world but also as a source of warmth that initiates a commotion of the most minute parts of our flesh and allows the innumerable cogs in the machinery formed by our bodies to smoothly play their part, keeping the fire of life burning under our skin.

The heavenly fire is nonetheless sometimes feebler in certain parts of the earth and at certain times than others. The faint glow of the moon and the distant stars scattered across the firmament do not give life any warmth during the dark hours, and the winter sun does not provide enough for life to thrive, forcing many creatures to burrow inside the earth in wait of the warm breeze of the spring. Fortunately for us, the gift of fire has also been offered to the living, by the heavens themselves, thrown down to the ground by thunderous clouds in the form of lightning, striking the tallest things standing out of the earth, the trees in particular. Ignited by fiery bolts, fires were frequently kindled across the earth, turning forests into seas of flames. Such events undoubtedly struck fear and awe in the hearts of the first men, who felt the scalding heat of such blaze touching their skin. If the earth was at those times enfolded by icy winds, such feelings may have been welcomed as sources of pleasure and relief, as their moist and cold flesh was offered comforting warmth by these flames. Occasionally, this gift may also have been offered by the earth itself, as it spilled rivers of its fiery blood over its own face, magma flowing out of volcanoes, but this would have been far rarer than the frequent thunderstorms striking daily some parts of the earth.

Endowed with his wit and his agile hands, man nonetheless ultimately wanted to imitate the work of the heavens, appropriating the secret of these fires kindled by the heavens. He first simply fed and

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In this chapter, fire is only examined in one of its dimensions: as a source of heat. The luminous dimension of fire will be described in the part concerning the appropriation of the skies.

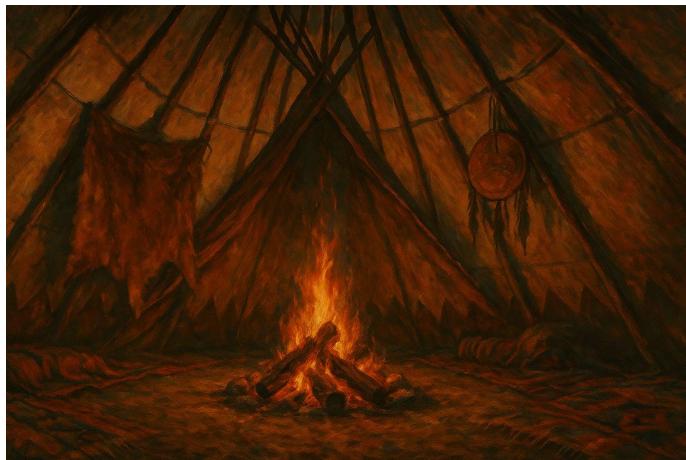
preserved these gifts of the sky, offering them dry wood to sustain them, diligently providing for them in exchange for their warmth, serving these fires in hope that they would help them survive the coldness of the earth in return. At the same time, man continued to run the race for the appropriation of the earth, striking earth against earth to make tools with stone, wood, and the other materials found on his land. One day, as one of these early artisans worked with pieces of wood, a discovery was made. Speedily rubbing a stick against another piece of wood, or using it to drill into one, man felt that the more vigorous the friction, the more heat was produced by this movement. Such heat could become so intense as to produce smoke and show signs of ignition. The artisan, pushed by his curiosity, then placed some tinder over the point where this friction occurred and soon found out that a flame could be thus produced, kindling a fire with the earth, using his own strength and efforts, rather than waiting for one to be offered to him by the heavens. A similar event, another path leading to the mastery of fire by mankind, occurred when another worker of the earthly materials violently struck a piece of flint against another kind of stone, one containing the substance forming a large part of the very core of our planet, and forged in the midst of ancient stars: iron. To this man, the nature of this element remained unknown and mysterious, but what he witnessed was nonetheless unmistakable. With each blow, a burst of sparks shot out of the impact point, miniature bits of fire that could ignite the hairs on his hands and tingle his skin. Unbeknownst to him, these sparks are the result of a sudden encounter between elements of the air and earth, the earthly iron entering into contact with the celestial oxygen, the two marrying each other and being consumed by this improbable union, turned into one burst of light and heat. Swiftly recognized as precursors of a true fire, these sparks were then directed toward tinder as well, also resulting in the kindling of a flame that could be turned into a blade, if properly fed and cared for.

The appropriation of fire by man represents another milestone of the great race. Thanks to this discovery of the manner in which the earth and the air can be turned into fire, man gained what for a long period appeared as a bottomless source of energy, alleviating the hardships linked with the coldness of the ground and the winds. Most of what we burn is dead, earthly matter, but these things fed to the flames also more often than not were at some point in time parts of life. The rocks covering the ground are unlikely to feed a



blaze, and the waters of the sea would only extinguish it. The heat released by the burning of a fire represents a release of energy that was stored in the earth, in blocks of inert matter, but this energy itself ultimately has another origin. Life is built from the ground up by the plants weaving the radiance of the sun together with the elements of the earth and those floating in the air, transforming the outflow of brilliance of our star into minuscule and yet strong bonds between bits of matter, bonds that demand energy to be formed. The logs thrown into a fire thus represent small vaults of solar radiance, patiently accumulated by life, while the flames unlock these vaults, leading to the escape of their content, in the form of light and heat. Once these former parts of life have been totally consumed, stripped of all their energy, every bond between their elements untied, what remains is a colorless pile of ashes, dust blown away by the winds that will seep deep into the soil carried by the celestial downpours, while other parts of them will join the clouds in the air in the form of smoke.

The wealth of the sun, stored by life and reclaimed by the earth, is thus appropriated by man. The fire kindled by his hands upon the ground becomes an image of the star above, a scintillating mass, but one that contrary to the original remains at all times present by his side, night and day, summer or winter, as long as he properly feeds and protects it. Men, women, and children congregate around its glowing embers and dancing flames. Lying down close to it, they feel safe and warm. They know that its presence gives them a better chance to resist the relentless assaults of the forces of nature, the unforgiving coldness of the earth and the sky, the wet soil and damp



air robbing bodies of their heat. Fire is man's ally in his continuous struggle against the earth, the sky, and other branches of life. He can now wield incandescent torches like weapons to scare away predators or scald their skin. He can chase away icy winds or dry up the ground with an intense blaze, nourished by the fallen pillars of the forests. This appropriation of fire gives man more power as he faces nature and other men.

The power of fire nonetheless also comes with dangers. Like the other things fed to the fire, man's flesh is also a storehouse of heavenly brilliance waiting to be released by the flames. It cannot endure direct contact with fire, as its heat causes such a commotion among the tiniest bits of matter forming it that all the minute structures essential to the functioning of the body would then swiftly crumble, turning life into death, man into dust, reclaimed by the earth. Too close, and his body suffers damage. Too far, and his body suffers from the cold. Man thus learns the proper distance to keep with this new, wondrous tool that he now possesses. He knows that a fire's appetite is insatiable, and that it can consume entire forests in a single day, and thus that it must be restrained by feeding it just enough for it to play its part in the life of man, controlling its size, adapting it to his needs. Fire is therefore normally insulated from what it can burn, kept within an enclosure of stone, dust, or simply distant from the countless other things that are part of man's world. In the same manner that a blade can cut the hand having created it, fire can bring the demise of the one who has kindled its first spark. Man thus learned to fear and respect his tool, knowing that the appropriation of the earth does not necessarily imply a perfect

control.

Wildfires thus give way to the hearth, a fire around which the family gathers once the daily toil of its members has ended, with them sleeping close to it to enjoy its pleasurable warmth as they retreat to the world of dreams, until the distant, fiery orb once again emerges out of the horizon and floods the earth with warm torrents of radiance. Man then grows less dependent on the benevolence of the gilded star in the sky. He learns to build his own world using his hands and his mind, using the earth, life, and the sky as resources, but also creating something that stands out from them, an environment bearing the marks of his will and his work, made to make his life more comfortable and help him in his daily struggle against nature and other men, to survive one more day above the earth and to pass on his essence and the fruit of his labor to a new generation. From the time of the first men until very recently, the hearth occupied a central place in the life of mankind. The secret of the appropriation of fire has been diligently transmitted to us, continuously from parent to offspring, and this knowledge is still valued, part of man's inheritance.

As our species appropriated the heat concealed within the cadavers of life, using fire at will, our life changed. Gathering around the glowing hearth by day and by night, the bond uniting families grew stronger. Throughout our (hi)story, the memories and stories of the old generations were passed on to the young from mouth to ear, during the long hours of dark and cold that forced them to remain close to the earthly fire. It became the center point of the living-space, an ardent pillar supporting communities scattered around the globe. The impact of the hearth was nonetheless also felt on man's body, as its heat formed a spherical shield. It protected him from the diseases associated with cold and moisture, imparting warmth to the air enveloping the bodies of those close to the fiery pit. This dome of warmth surrounding the hearth also allowed mankind to venture into parts of the earth that would otherwise have remained too inhospitable. Carrying torches or equipped with pieces of flint and iron-filled rocks, men boldly climbed high mountains or conquered the icy plains of the northern parts of our planet. When the earth itself was wrapped tightly in cold winds and snow, following transformations of the skies, they were able to resist death, preserving their life by using the reserves of radiance stored within wood and coal. Thus did man spread across the four corners of the earth, struggling against the rage of the skies, wielding fire like a weapon

of war, defending life.

The hearth, once occupying the center of the houses of the generations preceding us, has now vanished from the major part of our dwelling places. We no longer kindle fires during the morning twilight in wintertime, and few families now lovingly congregate around a glowing source of warmth, telling epic stories of yore while letting their skin absorb the radiance of the heavens stored inside the earth as coal. This nonetheless does not imply that the appropriation of fire has not left discernible traces in our daily life. The bright flames of the hearth may have been quenched in most parts of our planet, but it is simply because other tools now fulfill the same role. The need to unleash the wealth of warmth encapsulated within the earth is almost as present as it was at the dawn of our (hi)story. Looking inside the towers of stone of our world, we may there see the replacements of the hearth of our forefathers.

Massive pieces of metal are attached to our walls, filled with scalding liquid or through which intense currents of energetic particles pass, making them profusely radiate heat toward those present in their vicinity and warming the air, like a fireplace of old or a campfire on the ground once did for most of our ancestors. Approaching such a source of invisible but nonetheless indubitably real radiance, we may feel its warmth reaching our skin, without us seeing any glowing ember or colorful flames. In lands whose winter is harsh and long, such substitutes to the fire patiently mastered by our fathers are found all living quarters. Although often indirectly, they are mostly fed with remnants of living things reclaimed by the earth, in the form of coal, oil, or gaseous emanations extracted from the entrails of the soil. Gently placing our fingers upon these sources of heat, we may feel the force imparted to them slowly spreading to our entire body, warming up our blood and thus carrying this hidden treasure to the extremities of our limbs. Without such inventions; without the knowledge of how to release the wealth of the sun stored by the plants inside their bodies, then reclaimed by the earth after their death, would we be able to live in the land where we now stand? Would we survive a single revolution of our planet around the daystar if we were left at the mercy of the prodigious forces reigning in the sky? We may look with pride upon the ingenious work of our distant ancestors, who alone among all the other branches of the tree of life have pierced the secret of the kindling

of fire, becoming able to abundantly exploit the riches of warmth concealed around us and deep inside the ground.

Worldly knowledge nonetheless never equals a personal, earthly experience, one felt in the depths of one's skin and bones through the agency of the senses. We should therefore ourselves walk back on the path leading to the first masters of the earthly fire and kindle new flames using the tools they gave us in inheritance. Taking a lighter in our hand, let us ignite the fluid inside it with a swift movement of our finger, causing brightful sparks to erupt out of a firestone. We can then immediately feel the heat of this miniature blaze reaching our fingers, a blaze whose strength and extent are precisely controlled. We may then calmly behold the astonishing power of this modest flame. Left in prolonged contact with the objects around us, it could turn an entire city into a deadly brazier and reduce it to a pile of smoking ashes. We may have reduced the kindling of fire to the pressing of a fingertip on an earthly device, but fire remains an incredible force of nature, one that should commend our profound respect.

The understanding of the preciousness of fire nonetheless comes with the appropriation of the first techniques used to master it. Taking a sharp chunk of flint and a piece of iron, vigorously striking them, we may witness with our own eyes the miracle of the sparks being born out of the earth, the violent release of radiance, result of a brief but intense encounter between the earthly metal and the flammable aether tightly enfolding our planet, the oxy-gen stored in the sky by life itself.²

Having taken ample time to reflect on this encounter, the wondrous nature of this phenomenon, and on the profound impact its discovery had on the course of mankind, we may then direct the sparks shooting out of the metal toward a piece of tinder, calmly waiting for it to begin to combust, fanning its nascent flames with our breath, as if we offered it the breath of life, carefully feeding this young fire with little twigs, seeing it slowly grow. Meticulously piling increasingly larger pieces of wood, taking great care of offering a

2

The oxy-gen present in the air is indeed mostly the result of the titanic work of a few branches of life, the light-workers such as plants and some bacteria, which use the carbon present in the heavenly fluid and the luminous strength of our star to create new living things, while they release oxy-gen back to the sky, a waste of their diligent work of edification of life.

place for the air of the heavens to slip between the logs, we can then see our flames be slowly turned into a fire, and set the boundaries that they will be prevented from crossing, protecting our world from its destructive power. Listening to the faint lamentations uttered by the incandescent wood, watching the shattered logs darkened by the heat as they are consumed and turned into ashes, we may express our gratitude for the invaluable knowledge of this discovery, offered to us by the first men. Let us also be mindful of the path taken by this warmth that now enshrouds us and rejoices our senses, being aware that it represents the incomparable vigor of the sun itself, poured down over the earth and patiently collected by the emerald living things covering its face, encapsulated in the form of complex assemblies made of the smallest grains of matter within their bodies, and then, after their death, reclaimed by the earth and now released through the strenuous work of our hands. Humble shall we be, seeing our life so dependent on the boundless benevolence of our radiant star, even when many foolishly think they rely upon their own forces. Fully conscious that we are sustained by the humblest forms of life, we may honor these discreet beings, not only because they are a source of food for mankind, but also the source of the warmth that prevents our return to death when the sun's light is denied to us, such as during winter.

1.4 The Home - Dwelling Inside the Earth

Earth and sky stubbornly face one another, offering a stark contrast to the living beings caught between them. The earth is a giant mass of matter, stable and relatively rigid, while the sky is a seemingly infinite expanse filled with the fleeting, the ungraspable, the unreachable, constantly transformed, flowing. Man inhabits the face of the earth, his feeble body wrapped tightly in the air of the sky as with a featherlight, translucent garment, with this air nonetheless penetrating his chest each instant of his life. The lower realm offers him unrivalled security and stability, giving his feet support, while the upper realm grants him the freedom he needs to move and strive for the growth of life. The inconstant nature of the sky nonetheless poses challenges to the creatures standing upon the rocky earth. During the day, man is wrapped in the fiery brilliance of the sun, but when dusk comes and this celestial luminary retreats beyond the horizon, he is enshrouded in darkness and cold. The summer brings torrid air as well as torrential rains accompanied by thunder, while the winter comes with frigid winds and calamitous snowstorms. The great body of the earth, on the other hand, exhibits a relative constancy. The oceans of magma under its crust are always flowing between the core and the crust, and the continents forming our lands are moving as well, floating on these fiery oceans, even though their pace is too slow to be directly perceived by man's senses, and can only be inferred by his inquisitive mind. The earth appears as a haven of stability under the ever-flowing sky, and thus the living have, soon after they stepped foot on the dry land standing out of the tumult of the seas, learned to use the earth as a shelter against the devastating whims of the heavens, which may threaten their existence.

Our four-legged ancestors used their sharp claws to dig burrows into the clayey soil and take refuge from the unforgiving wrath of the skies and the unrelenting cruelty of other living things. Their descendants nonetheless slowly abandoned their earthly refuge, as their limbs grew longer and they turned into monkeys and apes as the ages went by, dwelling in the trees of ancient forests, being sheltered from the elements by life itself rather than the earth. Having then timidly descended from the wooden pillars of life, they then proudly stood, erect on their hind limbs, marking the birth of mankind, and they began to roam the plains and explore the dry land. Having lost the sharp claws of their ancestors, largely useless to the tree-



dwellers, they were left unable to dig the earth with their bare hands to find relief from the whims of the sky. But the earth still provided for them, offering large caves carved across eons by the flow of the heavenly waters onto the rocky face of the planet, and these became the first homes of our kind, parts of the earth appropriated by our fathers, made theirs, possessed like an object.

A home is a place where man feels safe, using the steadfast impenetrability of the earth as a shield preventing unwanted contact with what lies beyond the boundaries of its walls. It is a space standing against the rest of nature, a secluded area enclosed within the earth that contrasts with the immensity of the open air, the sky, as well as with the dark depths of the soil. The forces of nature threaten man, his loved ones, and his possessions, and thus he chooses to retreat from it, creating what appears to be a miniature world where he is fully in control, one in which he can spend time with an almost complete peace of mind, knowing that no dangerous things have been allowed within it.

The first homes of our fathers, the caves carved by nature on the side of cliffs and mountains, nonetheless had a side kept open at all times, allowing the possibility for the winds and animals to venture in, but they still already considerably improved our ancestors' safety compared to a life in the open. A vigilant eye could always be kept on the opening, while man knew that dangers would not come from the other sides. The roof offered cover from the winter rains and from the heat of the summer sun, and the side walls formed a perfect shield against the winds. A hearth guarded the entrance, providing warmth and light to those inside, while deterring predators having

learned to fear the power of the flames. Man then discovered ways to imitate the work of the earth, by building homes with his own hands, first with branches and massive mammoth bones, and then with stones and dust. This allowed him to open up new spaces that were totally shut off from the outside, sealed off from the rest of nature, only letting a thin flow of air gently circulate between the home and the open. His home became his impregnable fortress, his bulwark, a place that he can rule, in which all things belong to him, and in which nothing threatens him. Within the safety of his thick, impenetrable walls, the rage of the skies has been calmed, and the air is tame. The rocky and clayey ground has been shaped into an even surface, swept, adapted to the needs of its owner. An opening lets the light of the sky illuminate the home, but this flow of brilliance is rigorously controlled, and it can be stopped if it is not wanted.

The appropriation of the earth that comes with the building of a home may lead man to believe that he has freed himself from the yoke of the forces of nature, that he has conquered the earth and enslaved the sky, as he stands within this secluded space where he appears in control. He may nonetheless still be humbled by nature. His arrogance may be tested by the heavens and the earth, as tornadoes may turn his precious shelter into a worthless pile of rubble in the blink of an eye, and floods of water may engulf his decorated walls before he may realize what happened. The building or appropriation of a home gives man power. It prevents him from constantly becoming the victim of the dreadful whims of nature, but nature still dominates him, and he still depends on it for his survival. Furthermore, the creation of such spaces standing in contrast with the rest of the open country offers him an occasion to discover a new facet of the truth of nature, as he exits his dwelling each day, departing from this miniature world where every thing bears the mark of his hands, to rediscover the pristine beauty of the earth and the sky that lies beyond his walls. Conversely, returning to his home after a day outside, facing the harshness of the skies, the austerity of the earth, and the cruelty of life, he may finally see the nature of his home clearly, as a space distinct from the open country, the rest of nature, where he can find comfort and safety, inside his own little world. The daily experience of such a contrast may then become the source of a continuous illumination.

The impact of man's appropriation of an earthly home was wide and deep, resonating throughout his history and across the entire globe. By investing time and efforts to shape a piece of land, a piece



of earth into a home, man wove bonds between him and his new space, his new possession. Sleeping in the open, our most distant forebears could aimlessly wander the open country, following their inspiration and the signs of nature, roaming around the land to find food or someone with whom to give birth to an offspring. Owning a home, man is now inclined to stay near his property, coming back within its walls each day, when the face of the bright luminary is veiled by the earth. He becomes possessed by his property, worried about its condition when he is away for too long, fearing intrusions or its appropriation by others. Compromises are then found, in the form of tents, rudimentary shelters that can be easily moved around the land, but man tasted the sweetness of the home, the joy of having a place of his own, and he would not forget it.

The secure space he opened would nonetheless not only offer him protection, it would also represent a place where he could accumulate things. The larger the space cleared by his hands, the more he will want to make or acquire things to fill it, and with the increase in the earthly objects that he stores within his walls comes a tightening of the chains binding their owner to this home.

The benefits of the home to mankind are nonetheless manifold. The young are better protected from the coldness and dampness of the sky, enshrouded in a blanket of warm air imprisoned by earthly walls, and shielded from the ravening creatures roaming the open land. They thus survive in greater numbers than their forefathers and thrive all over the earth. Man can now sleep without fear of the sky and other parts of life. The closed nature of the home also fosters greater bonds between those sharing the same living space, especially

parents and children. They enjoy a greater intimacy within the cell that they form, without abandoning the relationships they have with their neighbors, those dwelling in other shelters in their vicinity.

As a result of the emergence of man's first construction, his world finds itself irremediably and profoundly transformed. Caught between earth and sky, there is now more to be seen than the tree of life. The landscape is no longer solely painted by nature itself. The hand of man becomes visible, increasingly present, over the face of the entire earth. Structures made of wood or stone emerge out of the depths, standing out from the rest of nature. As he travels across the dry land, man himself at first glance recognizes the signs of the hands of his species, this world built with the earth, under the sky, sheltering life, and that nonetheless appears distinct from all the rest of nature. Enthralled by the power offered to him by these places he appears to control, to rule, contrary to the open land ineluctably dominated by the forces of nature, men therefore devote a large part of their lives to continue to edify this world made by their own hands, from the earth below their feet. They ravage the forest for timber and scar the earth for its stones, inflating their world, without regard for the earth from which it is made, drunk with greed for possessions and lust for power over nature, which is nonetheless only a manner for them to participate in the play of love and war. The world that they build serves their kind, the summit of the tree of life, even though its construction may lead to the withering of many of its other branches.

Few of our contemporaries are exposed to the open air for the entirety of their days and nights, under the impassive gaze of the sun and the moon. Most men now only enjoy a narrow view of the boundless splendor of the heavens, through sheets of glass, as we earn our bread between walls of stone made by the hands of our brethren. At the end of our daily toil, we are briefly enfolded by the winds blowing over the earth and showered with the luminous gifts of the round, celestial fountainhead of fire, before we penetrate inside our home, another shelter insulating us from nature and from other men. So familiar is our home, so well-known is our village or city, that we have become blind to their effect on us, to the way they alienate man from the tangible truth of the earth from which they are forged, and from the crystal-clear truth of the sky that they enduringly conceal behind opaque roofs and walls. But now comes

a chance for us to lift the thick veil of everydayness that covers the essence of the home in our eyes.

Slowly closing our eyelids, heavy from the efforts of the day, let us invite the purest silence that reigns within these walls, letting it seep to reach the innermost parts of our bodies and the inscrutable depths of our hearts. The soothing whisper of the winds is rarely heard within these walls, and the torrential rains poured down by thunderous clouds hovering over our land hastily run over our slanted roof before plunging into the soil. Let us experience with our senses, married with our consciousness, the insulating power of these massive walls, how they shield us from the redoubtable forces of the sky and separate us from the dangerous, dusty, and moist nature of the earth. Carefully observing the inside of this treasured refuge, we see that it can be sealed off from the open, what lies beyond the walls. The door lets us, and those we choose, in, but the stranger cannot penetrate this part of the earth that we have made our own. Even the ethereal currents of the heavens can be barred from passing the threshold, being left at the door. Only the luminous envoys of the daystar are allowed to invade this space, through the windows, especially fashioned to welcome them and reject the other elements of the heavenly realm. We may now place the palms of our hands upon these solid barriers that protect us from the brutality of the skies and the malignity of men. Pressing on them vigorously with our hands, we can feel their impenetrable earthiness, their sturdy and firm nature, starkly contrasting with the ethereal nature of the sky and the softness of living things. We may now imagine how we would spend the present day if we were to be thrown into the open country, without shelter. How would our flesh and heart react to a single day of exposure to the unforgiving whims of the earth and the sky? So accustomed have we become to these gifts offered to us by our distant parents that our existence, our survival, may now heavily depend on them. Our homes and shelters, our world where the earth has been appropriated and shaped according to our will and needs, are now so entwined with our nature that our life may rest upon these walls of stone or wood.

Gently opening a window or standing at the threshold of a door leading to the open air, we may then feel the fresh wind blown from the heights, smoothly rushing inside, gently caressing our face. The melodious twittering of birds then surreptitiously slips into our ears, soothing our hearts, and the blinding incandescence of the celestial luminary fills up our eyes. This is an experience of the striking

contrast between the inside and the outside of our abode, our own space and the open, where the monumental forces of the earth and the sky strive against the towering world built by civilization, as they slowly disappear from the cities, banished from their artificial premises. If the weather is sufficiently clement, we may be delighted with this occasion to encounter signs of nature. We may nonetheless also remember the reason why our forefathers sought refuge within the somber entrails of the earth, and why the members of our branch of life are now used to spending most of their existence within man-made, concrete walls, raw earth made into a manufactured world, ruled by kings and our brethren.

The unequaled sweetness of being is always experienced through contrast. We need to courageously depart from our home to be homesick, to gain an awareness of how desperately we are attached to our motherland. We must be exposed to the untamable anger of the earth and the sky, sleeping upon the naked ground and letting our frail body be chilled by the freezing gusts of the night, to be struck by a clear vision of what a treasure we have been graciously given by our ancestors, who first discovered astute ways to shape the earth into a home, a place offering much-needed relief from the ruthlessness of nature. Let us now remember the various shelters we called home since our infancy, pondering how they improved our existence. What dangers would we have encountered without these humble abodes? What place do they presently occupy in the cluttered shelves of our memory?

Finally, let us take ample time to contemplate the landscape visible from our windows, and see this angular world built by our kind, the countless sharp-cornered houses and jagged buildings wrought with gravel and sand, now concealing the face of the earth from which they were made, and which also veil part of the skyline, the heavenly splendor. This synthetic world grows more and more each day. The craggy earth is slowly covered with smoothed tar and polished concrete, while the celestial vault is hidden by colossal towers of steel, glass, and stone. We may wonder at what point will this uninhibited expansion of man's world will come to an end, and when will he begin to ponder the ultimate destiny of his mighty creation. Returning to the cozy seclusion of our home, our refuge, we may nonetheless be glad to have the privilege of enjoying such a snug shelter, feeling a peculiar warmth in our hearts as we realize the chance we have of being able to escape the unrelenting brutality of nature, as well as to retreat from its overwhelming beauty, offering

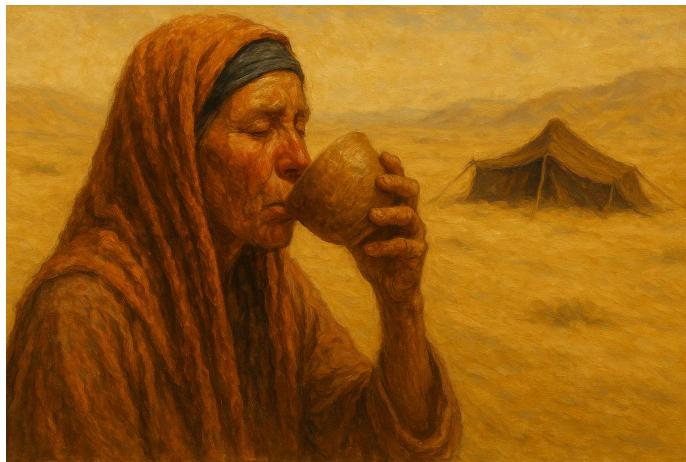
respite to our senses.

1.5 The Vessel - Holding with the Earth

Life was born in water, and this precious liquid is not only something that we must drink in order not to be devoured by the earth, it also constitutes the major part of our body. We are vessels of water made of flesh. We are like wineskins that, if pierced, would water the soil with the crimson fluid flowing through our veins. As we use the water held by our skin as a vehicle carrying away our waste or the excess of heat that may threaten our health, we often find ourselves in need of replenishing our reserves of this translucent liquid. Man is thus condemned to live near sources of fresh water, poured down by dark clouds that robbed the seas of their substance, patiently extracted by the luminous envoys dispatched by the sun. Kneeling and stooping to bring his mouth to the surface of brooks and lakes, he abundantly drinks from these glassy and tranquil springs of life, quenching his thirst and thereby oiling the intricate machinery formed by his body.

One of the peculiarities of water, partly giving it its value for life, is its running nature. Water is part of the earth, and it shares with the rocks and iron forming the bulk of the lower realm its tangible, incompressible nature, but contrary to them, it also exhibits the fluidity and transparency of the heavens above. Raining down from the clouds to the dry land, water rushes down back to the ocean, offering no resistance to the great pull of the earth, which attracts all material things toward its core. Each droplet of water is mostly on its own, even when accompanied by countless others, as contrary to the elements forming the rocky crust of our planet, they only form very weak bonds with one another.

The fluid, ungraspable nature of water posed some challenges to man, as he began to explore the dry land, appropriating increasingly larger parts of the earth and striving to reduce his dependency upon the whims of nature. The desire to stray away from the rivers and lakes grew more present, to obtain other resources or simply take distance from hostile groups of men and animals, but reserves of the precious liquid would have to be made to do so. Water nonetheless cannot be carried like pieces of wood or stones. It flees from the hands of man, slipping through any interstice between his fingers, before plunging into the ground. Man therefore learned to handle the liquid of life differently than other parts of the earth. He first cupped his hands to prevent its escape. He discovered that the



hemispherical shape taken by his hands would allow him to access it from the upper side, opened to the air, while the lower side, forming a closed vessel, impermeable to water, would prevent it from running down to the great body of the earth. The first men also observed this phenomenon upon the earth itself, seeing that concave-shaped stones would trap the rain, creating little puddles, and that larger cavities in the soil would form ponds and lakes after a downpour. Man thus learned the value of these natural vessels of nature, and he saw in them something that he could improve, appropriate, and make part of his own world.

Our forefathers probably first used natural vessels, often former parts of life, to collect and carry water away from a source. Among these, they may have used large shells and leaves, or the vegetable known as the “bottle gourd.” Emptied and dried, the bottle gourd represents an almost ideal water container, allowing man to undertake long journeys far from any source of water or simply saving him the effort of frequently leaving his home to quench his thirst. Having discovered the use of blades, he could then carve more durable vessels in wood. Their shape was tailored to different uses, as he saw that they could contain more than water, and thus a plethora of new earthly objects appeared in man’s home: cups, plates, bowls, jars, and countless others, all sharing the same essence as containers.

The vessel shares some of its nature with the one of the home, as the creation of both represents the opening up of a space, insulated from what lies beyond its borders, initially empty but destined to welcome other things inside and to shelter them. A significant difference can nonetheless immediately be noticed between the two

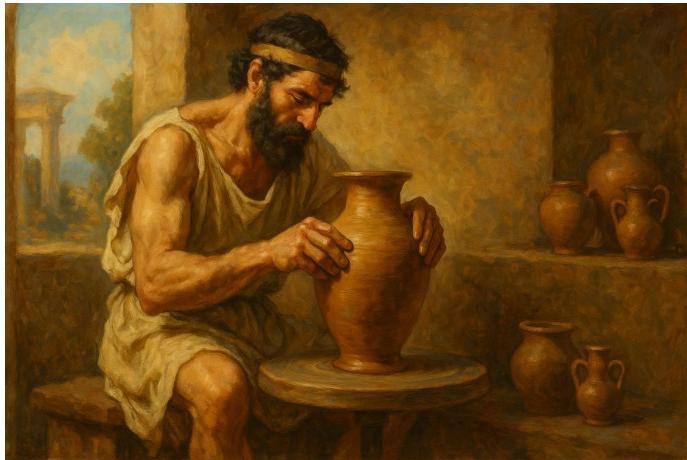
earthly objects. In the case of the home, the things or people found within its walls, this empty space opened by them, are indeed mainly protected from exposure to the forces of the sky, the gusty winds and the torrential rains that may extinguish the fire of life burning within their skin, keeping these forces outside. The essence of the water vessel, on the other hand, is to separate its content from the earth, using the substance of the earth itself to counter the inescapable downward pull of the great body of matter out of which life arose. It is a rigid wall standing between a fluid and the giant globe of earth below our feet. The difference in nature of the two opponents also affects the shape of the two things. Earth and air may be seen as opposites, because of their respective hardness and fluidity, and likewise, the home and the vessel may be seen as solutions to opposite problems. The home keeps the fluid filling up the sky away from the space it opens, preventing contact with the earthly or living things inside it, while the vessel keeps the fluid filling it away from the earth below. A building keeps things inside the earth, while a vessel keeps them away from it, ensuring that they remain above the surface of the earth, closer to the skies.

The very shape of a bowl, which probably was the first type of vessel made by the hand of man, can also tell us of the nature of the earth and the sky. A bowl represents a sphere cut in half, with its upper side removed. Its usefulness is directly tied to its position relative to the earth: only when the curve it forms points towards the sky does it adequately contain the fluid poured inside it, and when it is inclined and points toward the horizon or the earth, its content is then taken downward by the pull of the earth. The upper part of the bowl is opened, not only because it allows man to drink from it, but also because the forces of the sky do not threaten its content. Contrary to the earth, which unceasingly attracts all earthly things toward itself, with a prodigious force that can reach the highest parts of the heavens, the skies do not possess such a force that would empty the bowl in an instant. This nonetheless does not mean that the upper realm would be incapable of appropriating the precious fluid. Left outside for a sufficiently long time, exposed to the sun and the winds, the bowl may ultimately be robbed of its content, if watery enough, and this is one of the reasons why, ultimately, some vessels will be covered with lids. This nonetheless remains an exception. The essence of the vessel is to counter the force of the earth rather than those of the sky. Man therefore learned to appropriate earthly materials to use them to prevent water from being enticed to run

back into the ground and rejoin the large body of the oceans, making his life more comfortable and helping him as he strives to fulfil his role in the play of love and war.

Having understood the effect of the pull of the earth upon water and devised ways to efficiently counter it, man then realizes that the vessels he created can be used to contain all sorts of things, which share with the liquid of life some of their properties. Grains, nuts, and berries are like all earthly things also pulled downward, toward the iron core of our planet, and their rounded form causes them to easily roll on the ground. Placing them inside a bowl or a plate would prevent them from being scattered and put in contact with the dirt covering the ground. Juicy meat can now be eaten without spilling blood and water over oneself or one's home. The separation between the inside and outside of the vessel allows the emergence of different ways of treating the things contained in these two areas. What is inside the plate may be what is clean, safe to eat, kept away from the rest of the living space, which may bear the traces of things that should not be ingested. On the contrary, a vessel may also be used to contain poison, separating it from other things, so that it would not present a danger to those around it. A vessel separates, not only water from the earth, but also all kinds of things, which may belong to the earth, life, or the sky. It is a piece of earth that draws a surface in our world, separating things and preventing contact between them, shaped by man's hand and thereby showing how much he has progressed in his understanding and appropriation of the earth upon which he has built his world.

Man's world is deeply transformed by the emergence of vessels. They quickly begin to take an important place within his home. He first just brought enough water to quench the thirst of his family for the day, but he soon discovered that such vessels could be used to store food. Closed with a lid or a cork, non-perishable food could thus be protected from the wetness of the sky or the earth, from the heat and the light of the sun, and from the continuous assaults of hungry living things eager to steal the fruit of his labor, from the tiniest mold to the large, ravenous beasts roaming the dry land. Sealed in jars, poured in bottles, precious substances sustaining his body such as oils, wines, or grains could now be kept inside pantries and storehouses, hung in the air or buried in the ground. The consequences of this discovery on the life of our ancestors were profound. Reserves could now be made during times of plenty, alleviating the hardships of times of famine, thereby ensuring the survival of the



careful, those who have learned to expertly use the earth for their benefit. Seeing the earth barren during the dark and cold months of the winter, he could now eat from his reserves while waiting for the relief of the spring, when life would once again flourish. Wielding the power of the earth, in the form of jars, casks, or bottles, man can now better prepare himself to wage wars against the rest of nature. He grows less and less reliant on the benevolence of the skies or the one of the earth for his sustenance, spreading over time the need for him to find food, and thus the risk of starvation. The rodents, insects, and molds with which he was forced to share his food could now be denied their share, giving man confidence that he now rules over the rest of the tree of life.

As is the case with the use of all weapons, man's continuous appropriation of the earth nonetheless comes with dangers. The possibility to hoard things of the earth was opened by the possession of a home, closed from the open country outside its walls. The discovery of the power of earthly vessels only rekindled man's desire to possess more and more, his lust for possessions of the treasures of the earth. He can now accumulate more grain than he and his family could eat in a lifetime. He can store more wine than he could drink without being driven to an early death. Himself possessed by his fear of starvation, his will to survive, or simply drunk with the desire for prestige and status among his people, hoarding then becomes a natural tendency, one that is nothing but another manifestation of his participation in the play of love and war, as the wealth accumulated in these jars made of earth will ensure his survival and improve his attractiveness in the eyes of the opposite sex, whereas the poor have

greater chances to starve and leave no offspring behind. The one opening up an empty space ineluctably feels compelled to fill it, becoming possessed by this void expanse, perhaps even more than by the possessions he hoards inside it.

At a later point, some of our ancestors living near large expanses of water discovered a very peculiar type of vessel, one that would serve an opposite purpose to the others made by his hand, keeping water outside of its borders rather than inside. Having observed how large, hollow objects could float on tumultuous rivers and swollen seas, being carried by the currents without being engulfed by the waters, man cut down large trees and hollowed out their trunk, creating empty vessels resembling elongated bowls, in which they could sit. Probably after much refining and experiments, man thus made the first boat and ventured where no man had been before, ultimately exploring the high seas, in search of resources, land, or adventure. Using oars of wood, he pushes his vessel across the water, protected from the ferocious creatures of the sea and from drowning in its inscrutable depths. He is now what is contained by the container, and he thereby conquers new parts of the earth, islands of dry land standing out of the waters, which previously remained inaccessible, but also the oceans themselves, which cover most of the face of our planet, once again increasing the extent of his dominion, the reach of his world, using the earth to conquer the earth.

Suddenly expelled out of the womb, infants are meant to be fed from the breast of their mother, filled with nutritious milk satiating both their hunger and thirst. Soon weaned from our genitor's bosom, we are forthwith acquainted with the use of vessels wrought by the hands of men. They are among the first objects touched by our fingers, and from them, we draw the vivifying water and the delicious food allowing our body to patiently grow and mature. Briefly inspecting our dwelling, we can see how plentiful such vessels are, with many different kinds corresponding to different uses. Taking a cup or a glass into our hands, let us contemplate its nature, observing the sharp contrast between its tangible earthiness and the heavenly nature of the empty space it opens, leaving its upper side uncovered, facing the heavenly vault. We may notice its bottom part, forming a surface parallel with the face of the earth, while its side forms a tube pointing toward the sky. It is designed to collect things falling from above and to prevent these things from being spilled on the ground,

submitting to the far-reaching pull of the earth. Gently pouring water inside the glass, we may now watch this flow of transparent liquid slowly filling it, with minuscule waves tumultuously colliding with the vessel's borders and with each other. How simple and yet how marvelous is this ancient means of appropriation of the earth to contain water, keeping it inside our world, ready to be used by men instead of running back to be gulped by the thirsty, clayey soil and ultimately by the bulging ocean. This glass is no different in its essence than the very first one, used at the dawn of our civilization, and the knowledge of this elementary but incredibly impactful discovery has been passed on continuously, from them to us, sparing us considerable efforts for the satisfaction of one of our most pressing, natural needs.

Getting closer to a source of water, we may now attempt to grasp the translucent liquid of life with one hand, seeing it delicately slip through our fingers to hastily run into the dark entrails of the earth. Then, forming a crude cup with our two hands, we may then notice the inconspicuous perfection of this shape, able to retain the invaluable fluid, but also pay attention to the need for the vessel to form a single, compact block, without the smallest gap, in order to prevent its escape. If our fingers are relaxed, the water swiftly flees. Men thus learned to delegate this menial task to the earth, creating durable vessels that would without effort keep the precious liquid readily available to us, preventing its return in the rocky depths of the ground. How inconvenient would it be for us, had we not been given the inestimable knowledge of such of ordinary thing as a vessel? How would we eat and drink without these glasses, these plates, or these bottles that are now omnipresent in our world? The degree of civilization, the refinement of a culture, is often judged according to the use of such vessels, with a profusion of them being valued, and each one of them being associated with a particular use, this being seen as a sign of elegance and sophistication, even if it is also associated with a certain pomposity. Opinions may differ on this question, but it is undeniable that this manner in which the earth was further appropriated brought a significant contribution to the edification of our world, one that resonates through the life of each man, each day of his life, as he repeatedly and often unconsciously makes use of this incredibly primitive and yet remarkably powerful tool.

Calmly seizing a glass of water with one of our hands and taking a sip of the crystal-clear, vivifying liquid, let us now take a moment

to appreciate this impressive invention. We may honor the memory of the first men who offered it to us, when our cities had yet to be raised out of the ground, and when our languages had yet to first be uttered. We may contemplate the other containers made with the earth that are found within our homes or where we stand now. What place do they occupy in our lives? Having taken a few instants to ponder this question, we may now observe another facet of the glass in our hand, by gently inclining it to liberate what it contains, granting freedom to the fluid. Letting the water rush over the edge, like a slave having broken its shackles, we can be the witnesses of the liquid's eagerness to return to the earth, pulled by the invisible force of the lower realm. We can now imagine the lengthy, serpentine course of this water that will one day reach back the vast ocean whence it came, finally released from this prison of glass wherein it was kept, forced to remain available to us by this earthly object crafted by our hands. With this impromptu libation, let us appreciate the discreet power of the earth, appropriated by mankind, by us.

1.6 The Furniture - Adapting the Earth

Long and tortuous was the path taken by our bloodline before it became the glorious standing creature bearing the name of “man,” taking it from being a fish swimming in the azure expanse of the oceans to a crawling beast roaming the coasts above the waters, and then an animal inhabiting the trees forming the pillars of luxuriant forests, jumping from branch to branch, before settling down on the ground, standing erect on the rocky surface of the earth. Our body bears the indelible marks of each step of this stupendous journey across the ages and across the various habitats provided by the earth and the sky. Our feet are thus shaped to help us stand on the ground without tumbling, and the hairs adorning our heads protect us from the scorching heat of the daystar and the bitter coldness of the winds. The incredible rapidity of the transformation of man’s life that came with the beginning of his joining of the great race for the appropriation of nature nonetheless poses some challenges, as contrary to man’s ancestors, the pace of the evolution of his body became largely insignificant compared to the one of the edification of his world. It took a considerable time for the body of our tree-dwelling ancestors to adapt to the standing posture, resulting in the birth of mankind, but we cannot wait for the play of love and war to unhurriedly select those among us with the bodies that are the most adapted to our present world, and fortunately, we do not need to. What life has not given us, we can build with our own hands, using the earth to shape extensions of our bodies, tools to serve us and facilitate our existence.

Our skeleton was patiently shaped to allow us to comfortably stand up, pointing toward the sky, contrary to most creatures of the dry land, whose bodies remain stubbornly parallel with the face of the earth. The main benefit of this position is that it frees our hands, allowing us to use them to build up our world, but it also provides less stability than the posture we enjoyed when our distant ancestors walked on their four limbs. To stand without falling down to the ground requires efforts, and thus man tends to sit or lie down when offered the opportunity. Sitting on the bare ground is nonetheless far from comfortable for him, as his long legs and spine are ill-adapted to such a posture, with the pull of the earth constantly bringing him down, causing fatigue or pain. Man thus first learns to sit upon things standing out of the ground, such as rocks or fallen trees. This allowed him to assume a comfortable posture, well-adapted to the



shape of his skeleton, without the effort demanded by a standing position. Bringing such things inside his living space, appropriating them by shaping or constructing them entirely, man discovered a new kind of tool made of earth that would occupy a significant place in the home and the world of their descendants: furniture.

Pieces of furniture are a way to shape the earth so that the lower realm would better fit our needs. A stool allows us to sit without crossing our legs, and a chair also offers us a chance to rest our back in addition to the same function, giving us a way to effortlessly resist the omnipresent pull of the earth without submitting to this mysterious force, keeping an upright position rather than lying down. A large part of man's pieces of furniture is meant to elevate man away from the ground, from the face of the earth, because it lessens his efforts to move around his home. A bed or a chair elevated to the level of his thighs allows him to get out of them far more easily than it is to rise up from the ground. A table allows him to manipulate things while sitting or standing, forming what appears to be an elevated replica of the face of the earth, rigid and stable, where things can be placed without falling down to the floor while they remain easily accessible to the hands, the eyes, or the mouth. Shelves and cabinets also allow us to access the things they store by stacking them up on different levels, different surfaces imitating the face of the earth so that we would not need to stoop down to seize them.

The invention of furniture marks a new step in man's race for the appropriation of the earth. Mainly using pieces of wood, readily available and easily cut or carved, he devises ingenious ways of once

more using the earth to defeat the earth itself, as he continuously strives to resist its inescapable downward pull. The earth refuses the departure of life away from its bosom, and thus uses the considerable weight of its core to keep all things close to its surface, lying flat, being one with it rather than standing out. Unless man throws himself into the inscrutable depths of the skies, something demanding a prodigious amount of effort and resources, he inextricably lives his life under the yoke of this mysterious force wielded by the earth. The power of his mind nonetheless led him to discover ways to trick the earth, submitting to its pull while exploiting the nature of the lower realm to serve his interests. Thus does man fill his world with a plethora of objects made with the earth, replacing the relatively flat surface of our land with irregular shapes, meticulously tailored to fit his body and his needs. The parts of his world that he inhabits then bear little resemblance to the rest of the earth. Within his home, his cities, all is shaped with man in mind. The neatly trimmed vegetation of the parks is lined with benches shaped to embrace a human body. A large table around which families sit to prepare or eat their meals is found in his living room. Everywhere man goes, things of the earth made by the hands of his kind are there to serve him, to support his body, and prevent him from being pulled down to the earth out of which he came and to which he shall one day return. His new possessions once again give him power over the earth, but they also inexorably begin to possess him.

Rarely is man then in contact with the bare earth. So accustomed to seeing these earthly objects provide him relief from the pull of the earth, they now appear perfectly natural to him. Things are placed in the reach of his hands, elevated above the ground, and he can rest upon his pieces of furniture as surely as upon the face of the earth itself. He no longer dirties his body with the dust and the mud forming the soil under his feet, as he now appears to live in the heights, in the air rather than on the earth, with only the sole of his shoes touching the surface of the lower realm and the major part of his body remaining elevated rather than lying flat over the ground. Man gains confidence as he progressively appropriates the earth to turn it into his world, where things are in his control and at his service. The downside of this incredible success in the race for the appropriation of the earth is that he becomes extremely dependent on the creations of his fathers, and progressively forgets both the nature of the earth and the one of his own body. Living in unending comfort, tricking the earth by avoiding the effect of its pull on his

body, he becomes blind to this force altogether, and therefore also blind to his own nature, too busy edifying his world further, hiding the truth of nature behind a compact wall of things.

The invention of different kinds of furniture nonetheless significantly contributed to improving the health of man, and therefore his position within the tree of life. They reduce the fatigue of his body, allowing him to spend more strength and more time to reach the goals he set for himself, whatever they may be. The increased control over his environment that these tools offer allows him to improve the cleanliness of his home, as it is easier to keep the table where he eats or the bed where he sleeps clean than a parcel of dusty ground upon which he would spend his life. The floor becomes the surface upon which all the dust, the crumbs, or the scraps swept by the gusty air blowing through the windows or by his hands ultimately fall, pulled down by the earth itself. The lower surface of our dwellings is the most unclean, trodden by our feet but avoided by our hands, contrasting with the table, whose perfectly flat surface is frequently swept and kept pristine, showing how man instinctively values the elevated more than the lowly, the sky more than the earth that he makes his property.

Today as much as the day the first man illustriously rose up on his two feet, we are, every single instant of our lives, incessantly experiencing the smothering embrace of the earth, pulling us down toward the center of the gigantic mass of fiery matter forming our planet. The rigidity of our skeleton is a ingenious way life found to resist this force, as our distant ancestors painstakingly attempted to extirpate themselves from the turquoise shallows of the ocean, where all living things are supported by the waters, to venture upon the dry land, punctiliously extracting minute bits of minerals from the earth to form bones. Without our bones, our flesh would be flattened by this wearisome embrace of the earth, but the assistance they offer is nonetheless limited. Standing, we can feel the weight of our upper body and can realize that if we were to stop contracting the muscles of our back and legs, we would almost instantly and brutally fall to the ground, coerced by the earth to enter into contact with it. Let us slightly relax these bulging bundles of flesh pervading our body to let this invisible and yet astonishing force take hold of our body, before resisting it by contracting these bloody masses. Then can we be the witnesses of the astounding power of life, and experience in

our bones the way in which life itself, long before the emergence of mankind, appropriated the earth to form the sturdy, rigid frame of our body.

What has not been granted to us by life, we can nonetheless supplement with our hands and our mind. If the support offered by our skeleton is insufficient or ill-adapted to our present existence, we can now build different things using our nimble fingers and our sophisticated tools to wright the earth into new forms of support for our bodies. Slowly letting our bodily envelope embrace the curved contours of a chair, laying back to feel our torso entirely resting upon it, we may let ourselves feel the burden of our own machinery of life be lifted up from our back. Fully relaxing each one of our muscles, starting from our eyelids and ending with the tip of our toes, we experience the transfer of our weight, from our limbs to this object made with the tangible substance of the earth, sharing with it its hardness and stability, allowing us to adopt this pleasant position, not letting ourselves be brought down to the ground but nonetheless ceasing from resisting the omnipresent pull of our planet.

Placing the the palms of our hands down upon a table, delicately moving them to and fro over its surface, we may notice its almost perfect flatness, and the smoothness of the material it is made of. Comparing it with the rocky skin of the earth, the regularity and angled nature of the deliberately planned work of man stands out from the naturally emerging work of nature. The soil is covered with gravel and dust, abrading the skin in contact with it and sticking to it, but the surface of this piece of furniture, part of our world, is spotless, slick, leaving the hands passing upon it unscathed. Like the home, this is another space opened up by mankind, fruit of his labor of appropriation of the earth. It imitates the relative flatness of the ground but perfects it. It brings up a ground-like surface up, allowing us to refrain from dolorously stooping down earthward to enjoy a planar surface, stable and hard, to be used as a support to place and manipulate things, without seeing them falling further down. Let us now contemplate the nature of this surface, paying particular attention to its similitudes and differences with the coarse face of the earth.

Throwing a glance around, inside someone's home, we may notice the presence of other pieces of furniture that are now ubiquitous in the dwellings of men, of various shapes, sizes, and uses. Beds, chairs, tables, cupboards, and wardrobes are all now parts of our

world since our infancy. Let us patiently contemplate their nature, appreciate their uniqueness, and especially ponder their intended use. We now become fully aware of how most of them represent surfaces elevated away from the ground, bringing the flatness of the soil to the standing creature, forming a world centered around the height of our hands. It has not always been the case, and before our forebears appropriated the substance of our planet to make such furniture, the existence of man was largely focused on the ground, the bare earth of his living space, where he slept, sat, and toiled with his hands. We may now envision what our life would now be without these unostentatious treasures created by men who have now long been devoured by the earth. How uncomfortable it would be for us, born in this man-made world! But we may nonetheless wonder if such an intimacy with the ground would nonetheless not offer us a form of instruction concerning the essence of the earth, some long been forgotten knowledge, lost because of our excessive dependence on these tools. These pieces of furniture made of heavily transformed earth, rendered barely recognizable, indeed prevent us from entering into contact with the lower realm, basis of our world, whose substance not only forms large sections of our world but also our very flesh and bones. Grateful for the precious gifts offered by our ancestors, we may nonetheless, for a little while, abandon our inheritance, to venture out in the open air, lying down on the bare earth, plunging our fingers in its sooty depths, sleeping with our naked skin against the muddy soil. Through such an unmediated experience of the contrast between earth and world, nature and civilization, we may grow more aware of their complementary nature, and treasure each one of them, for man needs both in order to perceive the truth behind all things.

1.7 The Furnace - Shaping the Earth

Man beholds the endless, unhurried revolutions of the celestial wheels each day of his life, watching the dark night folds into a bright day, seeing the course of the pale moon and the twinkling stars adorning the firmament, or the passing of legions of woolly clouds over his land, but even though the lower realm may appear as an immobile, rigid body contrasting with the fleetingness and fluidity of the heavens, the earth on which the tree of life takes its roots is also continuously moving and flowing, with the various elements forming it unceasingly mixed with one another, as if our planet was a giant, spherical cauldron. The crust of the earth, basis of the ground beneath our feet, therefore appears rich in colors and textures. Different lands offer different gifts to those who learn to explore the opaque depths of the lower realm, and as the curiosity of our fathers was awakened by visions of the variety of the substance of the earth, they began to notice some of their properties. The oneness of the gigantic mass we call “earth” was then cut out by man’s mind into a multitude of substances, which then became parts of his world, endowed with unique names, and associated with a knowledge of their potential uses.

The beginning of a revolution that would profoundly change man’s world forever would nonetheless come when he discovered, probably by chance, that the heat of the hearth kindled in his home could transform certain substances forming the earth, changing their properties and thus also the use he could make of them. Making a fire pit over a ground made of clay, using it day after day, he may have noticed that the usually soft material had been baked by the flames into a dry, rigid lump. This lump was then investigated, and it was found to be waterproof, brittle, but also very resistant to the passing of time, work of the skies. Contrary to stone and wood, the wet clay could be shaped into almost any form without any tool and with few efforts, and thus the ability to harden such material would be found to be invaluable. The search for the best technique to fire the wet clay then began.

In some parts of the dry land, those particularly blessed with the radiance of the sun, the hardening of clay objects may have been performed by the star itself but, striving for independence from the forces of nature, man nonetheless devised another way. He formed small chambers with the earth, which trapped the heat of a fire

beneath it, accumulating it while spreading it uniformly. Things placed in such kilns would be exposed to intense heat, carefully controlled, for as long as needed, turning raw, soft earth into rigid and durable ceramic objects, part of his world.

The use of clay to form ceramic objects can be seen as man wielding earth and sky as tools to rob the earth of some of its substance so that he can edify his world. He first adds water to the clay he extracted from the ground, dissolving the bonds formed at the most minuscule scale, imparting some of the fluidity of water to it, making it more malleable by the hands of man. Driven by his inspiration, visions of his world, these hands shape an object, already imagining how it will facilitate his life or empower him. He then burns the remnants of dead living things, already reclaimed by the earth, to kindle a dreadful blaze heavily breathing the air of the sky, knowing that what has been shaped is still soft, easily yielding to the pull of the earth that wants to take this lump back to the ground. Using the fiery air blowing inside the furnace, allying himself with this force of the sky to resist the pull of the planet and claim this part of the lower realm as a part of his world, he deprives this object of moisture. He captures every bit of water pervading it, leading to the formation of stronger bonds in the lump of clay. Without water, this mass taken from the soil becomes like a rock, hard and impenetrable. More significantly, the shape imparted by man on its substance now finds itself preserved, not only resisting the downward pull but also further modifications by man himself. A lump of earth has been transformed into a part of man's world, with its substance barely recognizable, unostentatiously veiled behind its shape and its use. Man thus deepened his knowledge of the earth and furthered his appropriation of the lower realm, using it as a raw material to make ever more numerous things, to satiate his needs and fulfil his desires, while spending as little time and effort as possible.

The exploration nonetheless continued, as cultures rose and fell, with the acquired knowledge of the nature of the earth scrupulously passed on to new generations. Man ultimately unveiled the first metal, gold, found in the form of dust and nuggets, malleable enough to be hammered into relatively soft but beautiful objects, reflecting the light of the sun with a yellow tint, its splendid luster insensitive to the persistent assaults of the air. Another metal would nonetheless trigger the beginning of a new era for mankind, leading us to replace most of the tools made of stone: copper. Found embedded in rocks,



the appropriation of this new part of the earth would nonetheless demand both skills and effort, and this is why it took our ancestors so long to begin its exploitation. As for the firing of clay, this discovery was without a doubt a gift of fate, with man kindling a fire on top of rocks rich in the precious metal and noticing a change in the appearance of this earthly material. Metals nonetheless exhibit a different behavior when plunged into the fiery belly of a kiln than clay. They are already devoid of moisture and hard when they are in the earth, and man's hand is unable to separate them from the rocks and other elements with which they often appear, and even less capable of shaping them according to his will. Thrown into the blaze, chunks of rocky earth filled with bits of hardened metal nonetheless crumble, and these bits of metal begin to melt and, suddenly unable to resist the pull of the earth, they are gathered together, running like a water endowed with the radiance and heat of the sun itself. The air of the sky breathed by the earthly kiln ignites the wood fed to the fire, and the resulting brazier dissolves the bonds uniting the tiniest bits of metal and the other elements in which they were encased. The flame liberates the metal, under the eyes of man, who lets it run down the mouth of the flaming dragon that he shaped with the earth, as he sees its brightness slowly wane, being cooled by the winds. The bright liquid then turns into a dark solid piece.

The difference between the fired clay and the piece of metal running out of the furnace is striking. Throwing it against the earth with all his might or pressing on it with all his strength, man cannot break it. This perplexing element found in the entrails of the earth yields neither to the earth nor to life. Only the most intense flames,

kindled by marrying earthly combustible and heavenly air, can break the bonds uniting the parts of this piece of metal. Man then sees the opportunity offered to him by this wealth of the earth. He cannot shape the molten metal flowing out of the furnace with his hands, as he does with the clay, but he can direct this river of molten metal into a mold of wood, sand, or rock, that he can shape beforehand, and let the pull of the earth do its work, guiding this flow downward, filling the empty space scrupulously prepared for it. Man thus learned to shape emptiness, to create voids whose borders would form the contour of a metallic object rather than shape the object directly, as it was the case with clay. Ill-equipped to handle the flow of molten metal, as a tool made of stone would break from the heat and wood would burn, the tools required to handle red-hot metal probably were among the first objects cast by the novice smith, allowing him to use the durability of these new substances to prolong and widen the use of his tools. Using these tools, protecting him from the heat, the smith then developed other techniques to shape metals, such as forging.

Patiently, after many trials and errors, our forefathers learned to extract a variety of metals from the body of the earth, and even transform their nature to harden them further and give them other properties, such as resistance to the work of the skies and the aggression of water. Copper gave way to bronze, and then to iron and steel, demanding an increasingly wider knowledge of the earth and sophisticated techniques. This long work of appropriation of a new facet of the earth nonetheless paid off. The hardness and durability of the shining materials allowed the creation of objects far more intricate than those made of clay. They also allow the forging of weapons far larger and more resistant than anything made with stone, giving those who mastered the secrets of these metals a considerable advantage in battle, against other men and other branches of life. The rivers of bright liquid flowing out of the kilns led to the spilling of torrents of blood over the earth, with swords and daggers unceasingly slashing and piercing the bodies of men, women, and children, as the power of metals enthralled the heart of men, and rekindled their unconscious desire to participate in the play of love and war, without mercy for others standing in their way.

As with almost every other step of the great race for the appropriation of nature, the mastery of the wealth hidden inside the entrails of the earth has been a double-edged sword. The power it gave has been used to take lives, but also to save them. A knife

can destroy man's body when used by a warrior, but the same instrument used by a surgeon can heal it. The fire-breathing earth dragons, spiting molten metal and then even glass after being fed with wood or coal, caused man to clear out entire forests to satisfy the hunger of these voracious beasts and his uncontrollable lust for the shiny objects he could forge from what they excrete. Man waged a war against the forests, the home of many branches of life, his distant cousins, to inflate his world, unceasingly pillaging the earth of its substance by plunging inside it, mining it for ore, to make objects, things bearing the mark of his hands and appearing distinct from the rest of nature, things serving him. The durability of metallic objects nonetheless also fostered the development of the arts, using the new material to embody visions of beauty coming out of his mind into things made of earth, part of his world. Giant sculptures of bronze in palaces or small amulets of iron in a pocket, things made with expert hands, entirely devoted to this art, could now be fabricated in great numbers and pass through the ages, to finally find a place of choice in the museums built in our cities.

The revolution brought on by the furnace was indeed not only one that marked the mastery of new substances found inside the earth, but also the advent of the mass production of earthly objects. Bricks, amphorae, or plates made of clay could now be made extremely quickly, using molds for example. Weapons or vessels of iron could also be cast in great numbers using a single flow of molten metal. The pace at which man turned earth into world, the soil into objects, increased considerably. Each piece of ceramic, each metallic object, which would take many generations to be reclaimed by the earth, is added to man's world and stands between him and the truth of the earth and the sky. These things protect him from the dangers of nature, ensuring that he would survive famine or war, tempests and famines, but they also become a wall imprisoning him, one whose height and breadth are continuously increasing, as he himself participates in its edification each time he turns a part of the earth into yet another thing belonging to his world. If we make the earth our property, our storehouse of raw material, it is nonetheless only in response to our life instinct, commanding us to assume our role in the play of love and war, defending ourselves against the aggression of other branches of life, against the wrath of the sky and the harshness of the earth, even if it comes at the cost of destroying the greatest gifts we have received from nature and become enslaved by the products of our own hands, blind to our condition

as we seldom peer beyond these walls formed by our world.

As we serenely wander around the open country and glance at the gaping wounds of the earth, the chasms left as traces of the imperceptible movements of its crust, difficult it is for our uninitiated eye to identify the spectacle unfolded in front of us, the colorful palette of rocks decorated with random patterns by the passing of time, work of the skies. We nonetheless know that the metals ubiquitous in our lives were laboriously extirpated from these depths, sometimes at the end of extremely long tunnels, veins plunging deep inside the dark body of our planet, and carried by courageous men who spent their days away from the celestial brilliance, braving the fear of being entombed alive to offer us a flurry of objects made from copper, iron, silver, or gold. Let us gaze at the world around us and see which things are made of such metals, excised from the body of the earth. Let us ponder the reasons why such material was chosen. These are often things requiring endurance, to the elements, to abrasion, and prolonged contact with moving parts. Could these have been made of wood or stone? A moment of appreciation may then be devoted to those who braved danger to venture inside the veins of the earth and painstakingly drew out the ore they were made of, often only enjoying little consideration from other men and paying with their health these luxuries, now parts of our home and our world.

Taking a steel knife with our hand, we may now contemplate its surface, seeing how it almost perfectly reflects the radiance of the sun, as if the blade was the proudest representative of the earth, chasing away the celestial brilliance, refusing to absorb it, to let the heavenly envoys dilute its divine-like, earthly essence. Pressing it with our fingers, we can feel its hardness, a sign of this earthly nature, even though it shines like the sky, and using it to cut something, we can see how other parts of the earth or life unconditionally yield to its power. Let us consider this piece of steel, and imagine the sinuous course taken by its substance. Taken from the earth, iron ore was thrown into a blazing furnace, whose bright flames were fed by the earth, in the form of wood, coal, or oil; and fanned by the sky, harnessing the strength of the winds. This mysterious wealth of the ground melted and formed a turbulent lake of fire, then poured into series of molds and offered time to cool down, giving the knife its shape, before its edge was sharpened with a whetstone and its

body polished. Let the images of this long, ancient process enter our minds, as we wonder at the considerable efforts deployed to make such a simple instrument, used daily but whose usefulness has often been forgotten, hidden by its great familiarity.

We may now let our gaze search for things made of another substance, precious by its usefulness and yet plentifully available, appropriated by our forefathers as a result of the invention of the furnace: glass. Made with sand, used like an ore, often containing the shells of creatures once populating the seas crushed into a fine powder, the translucent material shares with baked clay its brittle nature and with metals the need to be melted inside a furnace to be shaped into objects by our hands. Hard as the rocky earth and clear as the ethereal sky, this material adorning our windows allows us to welcome the blinding radiance of the sun within our homes while keeping the winds and the rain outside. How dark and gloomy would our home be without such windows! How bitterly cold and frightfully insecure we would feel if these were mere openings, letting the four winds and the creatures flying through the air come and go freely within our living space. Far more accessible than metallic ores, the abundance of sand makes glass even more readily available than clay, while possessing a smoother surface, more easily kept pristine. Taking a glass object in our hand, touching its surface and looking through it, we may notice the inconspicuous beauty of this transparency, the pleasant nature of such smoothness, and be thankful for this gift, the fruit of the labor of men who industriously investigated the nature of the earth and toiled to produce such marvels.

The intricately woven silver chain we may wear around our neck; the elongated knife we use to slice our bread, or the tall glass with which we drink our finest wine, they all are fruits of the earth, products of our hands. Even the most resistant parts of our body, our teeth and bones, will probably be reduced to dust sooner than these objects. Imparted with a worldly nature by our hands and our will, they may be engulfed by the soil, but many will keep this shape given to them, even if our world crumbles and life completely vanishes from the face of the earth. Older than the earth itself are the metallic elements forming the things present around us, and long after we are gone, many of these things will find their way back into the lower realm, becoming faint traces of our past existence. Carefully choosing an object, bearing meaning and value to us, we may decide to give it back to the earth, throwing into the depths something that will outlive us, taking something away from our world

to offer it back to its source, taking a brick off the wall hiding the truth of nature from us, showing our immense appreciation for the generous presents of nature by returning what we selfishly took from it.

1.8 The Wheel - Rolling upon the Earth

From the smallest particle being part of the earth, the living cells, building blocks of our bodies, to the gigantic celestial bodies passing through the skies and the ages, the mystifying perfection of the spherical shape is ubiquitous in nature. This is the shape that naturally arises when a part of the earth is either submitted to a uniform force exerting a form of pressure on it or is free of any pressure. A spherical, living cell knows not up and down, no left and right. It simply is carried by its environment, just like an incandescent star shines in all directions, generously dispensing its light equally to all, as the only force shaping it is the pull of its own weight, causing it to adopt this sublime shape, where nothing stands out, where any points on its surface are found to be equally distant from its core. A disc or a sphere can be rotated around its center without appearing to move, as there are no distinctions between any part of its edge. If its surface is perfectly smooth, its movement is imperceptible but beautifully harmonious. Man probably began to observe the two larger spherical luminaries adorning the sky viewed from the earth with awe and wonder soon after the emergence of his species, but it nonetheless took him a considerable amount of time to perceive the potential offered by their shape, displayed across the firmament each day of his life, as a sign from the sky, a blueprint shown in the clear, azure heavens, showing him a way to further his appropriation of the earth, a new trick to bypass the influence of the smothering embrace of the lower realm.

Man nonetheless continued to conscientiously observe nature, and he enduringly interacted with the things of the earth and life. Felling trees and trimming their branches to make long logs, he noticed how they rolled over the earth, and that heavy things placed over them could be carried by such rolling cylinders, with considerably fewer efforts than it would take to pull or push them over the surface of the earth. Man thus learned to make use of the cylindrical shape of a part of the earth, exploiting the absolute perfection of the circle to once again turn parts of the earth into things belonging to his world. He carried enormous blocks of stone across plains and meadows, paving their way with rolling logs of wood, and erected them as monuments attesting to the power of man, his subjugation of the earth, and some of them still stand to this day, like in Stonehenge.

The rolling log nonetheless only marked the beginning of man's appropriation of the remarkable properties of the circular shape, the first step toward an invention that would revolutionize many aspects of his world: the wheel. The roughness of the earth untouched by the hand of hand, combined with the overbearing effect of the pull of the lower realm, make the dragging of heavy loads over its irregular surface not only strenuous but also damaging, with the friction inexorably abrading what is carried. The great power of cylindrical objects is to prevent such friction, acting as a buffer between the load and the earth, with their surface appearing boundless, like an infinitely large carpet continuously rolled underneath the load. The rolling object is only in contact with the earth on a single line of its surface, a line that is continuously moving, endlessly following the revolutions of this perplexing object, whereas a thing dragged upon the earth will have its entire bottom surface in constant contact and friction with it.

The essence of the use of the circular shape to overcome the pull of the earth resides in the fact that the circle can turn endlessly, without interruption. It has no beginning nor end, and thus can carry things across almost infinite distances, bearing a load while tricking the earth, by making this load rest upon the lower realm itself, at the line of contact between the earth and the cylinder, while it is being carried away. Thanks to this appropriation, the vertical pull of the earth no longer impedes horizontal movement in man's world. Earthly things, whose material has been taken from the depths of the soil, can now be brought to the four corners of man's world, providing him with invaluable help for the appropriation of the earth and the edification of the world, saving him considerable efforts and allowing him to build things that would have been unimaginable without it.

The first true wheel may nonetheless not have been used to bypass the ubiquitous and permanent effect of the pull of the earth, but rather to impart its circular shape upon objects made of clay. The potter's wheel is based upon a circular surface rotating around an axle found underneath it, at its center, and whose rotation is initiated by the potter's legs, leaving his hands free to patiently and artfully shape a piece of clay. This allowed the artisan of the earth to relatively effortlessly form potteries exhibiting a radial symmetry, often appearing more harmonious than irregularly shaped ones, but also enjoying increased structural stability, without sharp angles that could easily break, and a more evenly distributed pressure on its



surface, like in the shell of an egg.

At a later point, man applied the wheel and axle assembly to considerably improve the efficiency of the use of rolling pieces of wood to transport heavy loads. This marked the advent of the wheeled cart, the first of many wheeled vehicles which had a profound effect on man's world. He could now not only circumvent a large portion of the effect of the pull of the earth while moving things of the earth, but also could exploit this invisible force, letting the wheel run freely in sloped terrain, the entire cart and its load being carried both vertically and horizontally, as if tricking the earth to carry things where man wants them, even using inertia to sometimes climb slopes, rolling away from the core of the earth, along the way.

The impact of the invention of the wheel was profound. Considerably lessening the efforts necessary to bring men and goods to distant parts of the world, this world then appeared smaller in their eyes. The extent of land that a man could reach suddenly increased. Earthly things could then be moved around quickly and in great quantities, increasing the demand for massively produced goods like ceramic vessels or tools made of metals, and leading to further inflation of the number of things found in man's world. It also invited a deep transformation of the face of the earth itself, as the wheel demands a relatively flat and hard surface in order to be used efficiently. The pull of the earth causes the wheel venturing in the mud to penetrate it, impeding its turning, and a rugose, rocky soil demands constant efforts to push the load over the obstacles found in its way. Thus did man begin to pave the paths carved by feet, hooves, and wheels over the face of the earth with flat stones, offer-



ing stability to the wheels. Deeper than any time before, the scars left on the skin of the earth by the hand of man soon extended to the confines of the planet, with intricate networks of roads forming flat channels through which men and things flowed continuously, like the blood flowing in our veins and vessels, pervading our flesh. Man could now bring the entire world to him, using these wooden wheels, and growing dissatisfied with the nature of the face of the earth, he covered it with the products of his own hands, hiding it behind of veil of things belonging to his world, allowing him to increase his subjugation of the lower realm, augmenting his power and his capacity to survive the terrible rage of the forces of nature.

The weighty burden of earthly things moved around the world was thus lifted from the shoulders of the living, either beasts or men. No longer would they have to break their back to strive against the inescapable pull of the earth and to bring the wealth of the world to other lands. The health of various boughs of the tree of life involved improved, as they now placed their burden upon earthly objects themselves. They made the earth itself carry the weight of their flourishing wealth, only pushing and guiding the carts onto their destination, something demanding few efforts compared to what carrying it on their shoulders would have required. Another step was thus taken in the race for the appropriation of the earth, with the inventive subjugator of the earth leaving other, less creative men behind, weakened and less likely to assume an important role in the play of love and war.

Picturing the incomparable ardor of the daystar in our mind, as its brightness is too overwhelming to be directly observed by our eyes without risk, its spherical form offers us a vivid image of the simplest expression of what harmony is. It shows no sharp angles, no sides, no poles, only complete uniformity. We know that this shape is also the one of the planet whereon we now stand. Its surface is limited, and yet, it also incarnates a kind of boundlessness. One may indeed continuously walk upon its surface, forever, without reaching its end and without interruption. A finite object can be used as the basis of an infinite progression. Looking at a wheel, part of our world, we may recognize the remarkable ability of this astonishingly rudimentary instrument to be the support of a potentially infinite journey, as it can trace a limitless and continuous groove upon the surface of the planet. The wheel is perfectly finite, but its essence is to possess no beginning nor end, and it therefore opens up the possibility of an endless, unbroken revolving and contact with what it touches, the earth in particular. Attentively observing the turning of a wheel, we may ponder the perplexing contrast between the simplicity of its shape and the boundless nature of its revolutions.

Looking at the containers of the food and beverages around our home, the cups and glasses we use to drink, the plates and bowls with which we eat, we may also notice that many of them exhibit a radial symmetry. Looked at from above, many appear as circles. Their inner surface is smooth and without angles, allowing them to be cleaned almost effortlessly, sweeping them with a continuous motion, rotating them with our hands. This rounded shape may be seen as a trace of the use of the potter's wheel, which has now largely disappeared, but whose influence on our ideas concerning what a cup or a plate should look like remains visible in our world, an imprint of the past displayed in the present.

Now grasping a cylindrical object, such as a glass, into our hands and rolling it between them, we may directly experience motion without friction, the essence of the ingenious power of the wheel. We can feel the totality of its surface entering into contact with the skin of our palms or fingers, without effort. Placing the round object in our palm, our hand facing upward, we may drag the object over the skin of our hand, and feel the resulting friction, the resistance it obstinately opposes to this movement, demanding significantly more force than the rolling motion. There lies the remarkably simple gift of the wheel, offered to us by our ancestors, perhaps themselves inspired by sightings of the celestial bodies.

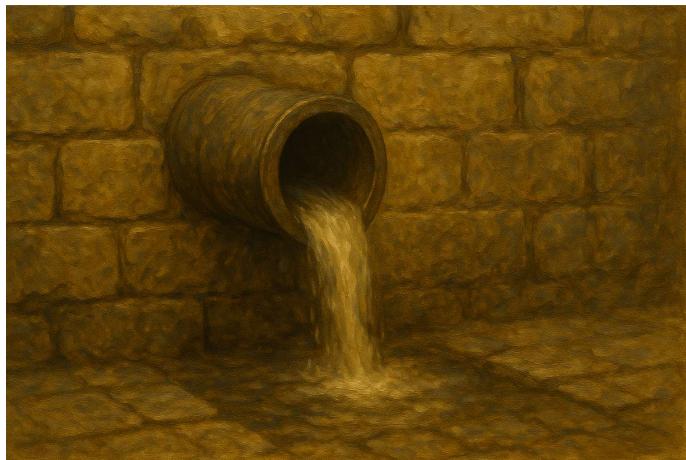
Climbing inside a wheeled vehicle, we may feel our body being gently carried away to another corner of the earth, another area of our world, without the slightest effort spent on our side. We may then grow aware of the astounding smoothness of this movement involving an enormous mass of earth shaped into countless parts forming this elaborate vehicle, but almost no friction. Its weight rests upon the bottom of the wheels, endlessly turning, with these resting points incessantly changing, without beginning nor end. What prodigious force would be required to move this mass without wielding the power of the wheel, if it were to be fastidiously carried or dragged across the face of the earth? The existence of the lofty towers of our cities, or the infinitely long streets filled with earthly trinkets made to satisfy our every desire, would not have been possible if our ancestors had not unveiled the nature of the wheel and harnessed its power to overcome the considerable impediment caused by the omnipresent downward pull of the earth. By the strength of the circle, as if wielding the power of the celestial luminaries, they gloriously vanquished the great body of the earth and they celebrated their triumph by covering its surface, making it theirs, flattening its irregularities, and smoothing its rugose face to dampen the encounters between the earth and the wheels of the world. Let us feel how extensive and thorough is our shaping and flattening of the earth, made to satisfy our desire for a smooth rolling of our vehicles, hiding the roughness of the soil beneath our world with layers of fine gravel, tar, or steel tracks. We stand in awe of the dazzling simplicity and of the unrivaled power of the wheel as we let ourselves be carried away. Watching the wheels of the other vehicles visible through the windows, we may imagine the incredible weight being borne across our entire world at this precise instant, by all the wheels made by our brethren. The weight of a large part of our world rests upon these circular instruments.

1.9 The Pipe - Channeling the Earth

Once our four-legged ancestors strenuously extracted their bodies out of the great ocean to venture inside the dry land enfolded with the celestial ether, they were condemned to follow the watery veins of the earth, the turbulent rivers running down from the highest peak to return to the great expanse of water covering most of the surface of our planet. Our bodies are still mostly made of this transparent liquid of life, and as our moisture is continuously being snatched away from us by the blazing heat of the sun and the gusty winds, we must frequently replenish our reserves of water, drinking the translucent sweat of the earth abundantly, directly from these vessels covering the dry land. Man is therefore forced to remain close to sources of fresh water, and he settles new lands by following the rivers inland. This dependency upon the network of water vessels of the earth would nonetheless soon prove to displease our forebears, and they then undertook the task of finding astute ways to appropriate the water flowing upon the dry land, stubbornly refusing to let themselves be told where to live by the lower realm. If he does not want to go to the brooks, rivers, and lakes forming the natural reserves of the liquid of life, he can shape the earth itself to divert their course, making the water effortlessly come to him.

Digging deep furrows inside the earth, man realized that he could channel the content of a body of water to make it run wherever he wanted. The sole condition, he discovered, was that its destination must be less elevated than the source, as the exploitation of the pull of the earth was needed in order for the water to flow, and the earth ineluctably takes all things down, toward its core. The flow could theoretically be taken over any part of the land, if a sufficiently abundant source is found in its most elevated point, but this would demand that the channel be continuously slanted downward, without any climbing, which would not only stop but also reverse the flow, something almost impossible if it were to run directly over the face of the earth, considering its highly irregular shape. Using his ingenuity, man nonetheless found a way, building colossal structures that would provide a continuous slope to the water flow, erasing the irregularities of the surface of the earth with arches of stone and paved, water-tight roads, which would take the name of “aqueducts.”

The aqueducts and man-made channels brought fresh water to



new parts of the dry land, which may only have been watered by infrequent downpours or shallow brooks, insufficient to sustain the presence and alleviate the thirst of a large community of men. The arrival of massive flows of water also fostered the blossoming of the tree of life in these new lands, as the earth began to be abundantly watered, stimulating the sprouting of grasses and plants, which in turn brought on the arrival of a great diversity of creatures. Appropriating the water flowing over the earth, man therefore began to use its life-giving power to turn deserts into oases, wastelands into luxuriant pastures or prosperous cities. His hand transformed the face of the earth to make it more hospitable to life as a whole, but he would not stop there.

The aqueducts brought almost inexhaustible sources of water to the cities built away from large rivers and lakes, but man would soon learn to refine his mastery of the flow of the water generously offered to the living by the lofty clouds carried by the winds. Applying the knowledge of the earth he received in inheritance, and in particular the capacity to shape the body of the earth into things made of ceramics and metals, he then discovered that series of elongated, bottomless vessels could be used to guide the precious liquid inside every part of a city, allowing it to flow in tubular paths passing through apertures carved in walls and beneath the ground. Meticulously assembled, piece by piece, long tubes made of clay allow water to run down into pools where man can draw water to drink, or into chambers where he can bathe in it, before the soiled water is carried away and taken out of the city, given to the earth or the seas.

The subjugation of the fresh water found on the dry land saved

man considerable efforts, as he no longer has to unceasingly carry water from a distant river or a deep well every day of his life. Liberated from this exhausting chore, the time and energy spent on it could now be put to another use. It also marked the advent of sanitation, improving the health and comfort of the inhabitants of cities, starting from a few specialized buildings in the city, like bathhouses, but eventually spreading to every home. Man suddenly was placed in the middle of a vast network of water pipes, built to serve him. He nonetheless himself can be seen as a living tube through which the flow of the waters passes, as it runs into his mouth, filling most of his flesh, and part of it is then evacuated from below, unhurriedly running into the sanitation pipes before joining back the vastness of the ocean and once again be brought up by the luminous envoys of the sun to form cottony clouds hovering over the earth. Man may be seen as a part of the intricate network of watery veins of the earth, connected through its thinnest vessels. This network, including the widest riverbeds and the thinnest pipe, but also the most minute blood vessels of his body, sustains his life as the liquid flows inside him. Outside of his flesh, this flow improves his health and enhances his level of comfort as it washes away the filth accumulated on his skin, the dirt, the sweat, the blood, and the tears that ineluctably come after days of intensive labor, leaving him clean, his soul refreshed by the intimate contact with the invaluable substance forming the motherly womb of life from which life emerged, the great, azure ocean.

Beginning with crude, shallow furrows diverting rivers, man learned to appropriate the nature of the waters running over the dry land. He first came to realize that their flow was initiated by the ubiquitous pull of the earth, which takes every thing downward, and thus how the network of pipes pervading a city inevitably had to follow such a downward trajectory. He then also understood the nature of the pressure exerted on the waters by this pull. The smaller the pipe, the greater the speed of the flow inside it, and thus the less likely it is to stagnate. The greater an evacuation pipe is, the less likely it is to be clogged by waste. The network of earthly pipes thus exhibits man's knowledge of the nature of water and his understanding of the earth. The origin, the source of the liquid of life is concealed behind these opaque pipes buried in the earth, and man now only sees it as a commodity that appears to naturally run to him, serving his daily needs and sustaining his body. Its appropriation is complete, and thus its value in the eyes of men is considerably



decreased, as he no longer suffers from thirst, no longer desperately explores the open country in search of a spring, but rather only has to walk a few steps to moisten his dry throat.

The convenience offered to man by the refinement of his world brought on by the mastery of water, his progress on the race for the appropriation of the earth, therefore allows him to stay within the rampart of his city, within the walls of his home, having been freed from the need to venture outside to find water. The precious liquid now runs to him, pulled by the weights of the iron core of the blue planet, through a maze-like infrastructure built and passed on to him by his predecessors. Edified further and further, elevated higher and higher away from the earth, man's world thus increasingly severs the last bonds between him and nature, what does not bear the mark of his hands. So comfortable his existence becomes that he no longer has to strive against the prodigious forces of nature, protected by the world of man as with an indestructible shield, without realizing that the walls around him are becoming a luxurious tomb, a deceptively pleasant prison, depriving him of the bliss of interacting with the glorious earth and the mysterious skies, the joy that comes when standing up to the monumental forces of nature, the satisfaction that comes with the discovery of a cold river after suffering from thirst for a whole day, under the fiery gaze of the afternoon sun. Comfort may be better than death, and the great race for the appropriation of nature may give more than it takes from man, but that does not imply that he should let himself be enslaved by his world, letting himself passively being carried by its flow, oblivious to where it takes him.

Life was born in water, and this liquid now forms the bulk of the tree of life, pervading our body and flowing through our veins. Fresh water also runs over the earth night and day, patiently extracted by the radiant envoys of the sun from the oceans, the soil, and even living things. These ardent vapors are then gathered by the winds into misty clouds aimlessly roaming the heavens, before they are rained down upon lands and seas. If this water falls over the dry land, it leisurely wanders back to the liquid cradle of life, unsparingly watering the tree of life on its long way down. Our forebears learned to make this flux their inalienable possession, controlling the paths it takes.

Perhaps inspired by life itself, as our ancestors saw the intricate network of vessels carrying blood throughout the limbs of the animals they butchered for their sustenance, they made similar veins with clay and metals, to bring water to us, into our homes, so that we would be spared of the need to find and carry it. Their shape and the materials they are now made of have significantly changed since this means of appropriation of the earth was first invented, but they are now omnipresent, forming the scaffold of our metropolises. The convoluted web of pipes bringing water to us not only pervades our cities, it almost covers the entirety of the inhabited parts of our world, including the most remote dwellings, drawing water directly from the dark and quiet depths of the soil. They may now be hidden inside our walls, buried under our floor, but the mouths of steel of these sinuous pipes, the faucets allowing us to be masters of the flow of water inside them, are a sign, a discreet reminder of the presence of the entire web. We may observe the place occupied by this liquid network inside our habitation and vividly picture in our mind the entirety of the web it forms over our land. We may then notice the nature of the areas where this subjugated brook is accessible in our home, the bathroom and kitchen, observing the spaces created to let us enter into contact with it, the sinks, the showers, the toilets, which all represent locations where the flux of fresh water can be momentarily accessed. These are like open veins, places where water can be poured inside our bodies if we drink it, or outside of it if we use it to wash ourselves. These spaces are mere gaps in the gargantuan maze of pipes, as most of the liquid of life then immediately flows down into the receiving mouth of another iron vein underneath, carrying it away back to the vastness of the ocean.

Approaching a faucet, and gently opening it, we can see the clear liquid of life suddenly gushing out, noisily escaping from its tubular prison, running into the hole under it, heading back toward the vast expanses of the ocean, only reached after a long journey, running on a tortuous path. Letting this miniature river softly caress our skin before slipping through our fingers, the almost miraculous nature of this level of appropriation of the clear fluid poured down by the sky from the celestial vaults, part of the earth, should leave us in awe of the amount of power gained over the earth by our fathers. Let us picture the lengthy course of these transparent droplets falling from our hands, how they were once part of the immense surface of the ocean and were enfolded by the blazing radiance of the daystar, picked up by the zephyrs to join gigantic legions of fleecy clouds silently hovering over the earth. Poured over the dry land as these clouds encountered vigorous gusts of cold air, these drops were scattered over the earth, immediately running down, pulled by the heavy, iron core of the earth. Joining their forces on their way down, all choosing the lowest path, they patiently formed torrential rivers and quiet lakes, above and under the surface of the earth, at which point man guided them into his convoluted web of pipes, trapping them and forcing them to deviate from their natural course to visit his cities, to pass through the living tubes formed by our bodies or to slide over our skin, before finally reaching their temporary destination, waiting to once again be caught in this endless cycle. We should appreciate this gift of water running into our homes, the result of prodigious efforts by those preceding us, who exerted their minds and flexed their muscles, that we may be freed of the imperative need to find and carry the crystal-clear liquid forming most of our body and oiling the machinery of life.

The relentless efforts of mankind to appropriate the earth nevertheless often only represent poor imitations of what life has discovered long before the rise of man. Our body itself already contains an astonishingly intricate web of tubes made of flesh and muscles, the countless blood vessels running from our head to our toes and fingers, and when we place our thirsty lips on the flow coming out of the faucet, we only connect the man-made, metallic web of veins to the one patiently assembled by life itself, after innumerable trials and a stringent selection, with the fluid passing through these incredibly thin tubes before they depart from our body, carried back to the clouds by the winds or flowing away from the lower parts of our body, collected by the pipes carrying wastewater. Let the awareness

of the unity of these different webs of water-carrying pipes and tubes penetrate our consciousness, and let us see our place in the water cycle, the role we play in it, and the role it plays in our existence, here upon the dry land, away from the sea.

Invaluable has the emergence of running water been for our branch of the tree of life. To come to realize this, we may calmly imagine what our life would be like in our cities without it, and especially without sanitation, without the use of water to carry away the waste excreted by our bodies. Our large cities would then hardly be inhabitable. If we can enjoy living in close proximity with so many people, something favoring exchanges between us, chasing away solitude, and making us more apt to resist the unforgiving wrath of nature, it is also because we found ingenious ways to appropriate the clear liquid running over the asperous face of our planet. This nonetheless should not lead us to forget the hefty price we pay for this privilege, this audacious subjugation of nature. Being so readily and effortlessly available, the true value of water has now been largely forgotten by a great part of our species. Without experiencing an intense thirst and being unable to locate a source of the fluid of life, we fail to see the incredibly precious nature of water. Without feeling death surreptitiously approaching as a result of the slow desiccation of our body, the crumbling of the machinery of the body deprived of its vital oil, we cannot realize the true place occupied by this mystifying substance in our existence. Let us therefore strive to unhesitatingly flee the comfort of our luxurious homes and convenient cities, running into the open country, walking under the blazing gaze of our star and searching where the heavenly forces pour out the wealth hidden in their cottony vaults. Let us scrupulously search the secret places where the droplets of rain congregate. Let us seek the wave-less lakes and raging rivers they form before running back to the great ocean, balanced by the moon, and let us get reacquainted with these sources found all over the earth, plunging our entire flesh in their waters and avidly drinking from them, letting this memory be indelibly etched in the depths of our mind, that we may finally feel the true value of the liquid of life each time we let it flow inside our cozy home.

1.10 The Mechanism - Articulating the Earth

The subjugation of the earth by man not only involves a familiarity with the nature of the substance of the earth, that is, with all the materials it is made of, but also a wide knowledge of what shape can be imparted to it and of the use the resulting object can have. A crucial step was taken by the standing creature early on in this race for the appropriation of the lower realm, when he discovered that he could form assemblies of things, making new objects by associating different ones, gathering various shapes made with different materials. Stone blades were attached to sticks, and spear-throwers were used to extend the length of a hunter's arm, using the lever effect to considerably enhance the force of his projectile. Progress in such regard was rather sluggish, as it not only required skillful hands and nimble fingers to fashion objects, but also a sharp mind that understood the nature of the earth, the rules governing its behavior. The wheel and axle assembly represented an important step toward the invention of more sophisticated objects, but a decisive one was the discovery of gear assemblies, marking the emergence of increasingly complex machines.

The essence of the machine is to use a force to perform work, transforming a form of energy into movement, a movement precisely directed and channeled, through the use of assemblies of earthly parts articulated with one another. The source of this force setting the machine into motion may be man himself. When he pulls the string of a bow, the strength of his arm is accumulated as tension in the bent wooden frame and the tensed string, and this force is then released and used to propel the arrow with a force considerably more intense than if man had thrown it directly with his hand. A catapult represents a similar device, but one using the strength of several men and a complex assembly of wheels and levers. This force can nonetheless also belong to the earth, other parts of life, or even the sky itself. One of the earliest complex machines harnessing a force of nature appears to have been the water wheel, which uses the flow of a river to set a giant wheel into motion, as the water exerts pressure on flat panels attached to the rim of the wheel, pushing it in the direction of the flow and causing the wheel to turn. The rotation of the axle is then used to set into motion a series of gears that change the direction of the movement of the axle, and perhaps also its speed, allowing this force to be exploited to perform a particular work, such



as grinding grain to make flour with the help of a millstone.

As man's great race for the appropriation of the earth continues, an increasingly voluminous pile of objects is accumulated in his world, passed on from generation to generation, and readily available to them. They can use every single one of them as a steppingstone to elevate their branch of the tree of life, to edify their world to new heights. The stick, the wheel, and the gear can now be used to form new things, according to man's fertile imagination and the needs of the participants in the race. They are bricks with which he can build, as he continues to devise new varieties of such building blocks, with an infinity of potential things that can be brought into his world by using them. The discovery of mechanisms and machines by man nonetheless once again only comes long after similar things were discovered by life itself. Our skeleton largely represents a complex mechanism set into motion by the myriad of muscles attached to it, ultimately fueled by the nutrients in our food, themselves patiently formed through the meticulous weaving of sunlight, air, and earth by plants. The articulations of our limbs represent a rich assembly of bones, made with minerals extracted by life from the earth, and the examination of the body of men and animals may have inspired the creation of new objects made with their hands.

Like other tools, machines are an ingenious way for man to extend his body, to compensate for its lacks with things made with the earth, and to relieve him of the burden of using his own flesh and strengths to shape the earth and edify his world, using machines to harness the strength of nature or simply improve the efficiency of his own efforts. A water wheel can be used to pump water and raise

it up, then allowing it to run into his dwelling, using the pull of the earth to counter the effect of this other pull and then direct it so that it would serve man's needs. A bicycle uses the strength of our legs, but it considerably improves the efficiency of our movement, allowing us to travel farther, at high speed, spending far less effort than by walking.

Mechanisms are nonetheless more than a clever means for man to save his own strengths and harness those of the earth, life, and the sky to edify his world. Some of the most common mechanisms present in our daily life have a nature and purpose that transcends the earthly nature of the parts of which they are composed. A lock and key mechanism, for example, may be a mere assembly of carefully manufactured pieces of metal, closely fitted together and set into motion by the rotation of the key initiated by the hand of man, but its purpose is not merely to exploit the strength of the hand to perform a work, or to spare him some efforts. Its purpose is to deny entry to those not holding a specific key, the mark of ownership of what is found beyond the lock, or at least the sign of a right to access it. The lock's essence is to refuse to let its opening mechanism be set into motion without the possession of a particular code, a pattern etched in the metal of the key. The refusal to move without the proper key shows that the lock "works," without performing any work, only identifying patterns to deny access to parts of man's world, showing that its essence is not to perform an earthly work but rather to fulfil a purpose in his world, tied to metaphysical concepts unique to man, such as ownership or right of access. Another example is the mechanical clock, a fine assembly of extremely precisely created gears and springs, powered by the hand of man, but whose purpose is not to shape the earth but rather to quantify the work of the skies, allowing man to split the continuity of the turning of the gigantic celestial wheels into numbers, hours, minutes, and seconds, which are mere creations of his mind, existing only inside his world. The clock thus represents a way by which the appropriation of the earth, in the form of an assembly of pieces of metal extracted from the soil, contributes to the creation and support of purely worldly concepts, such as the quantification of the passing of time.

The appropriation of complex assemblies using parts made from the earth allows an incredible expansion of man's world, with the emergence of a flurry of new things built to serve him, bending the earth to force it to fulfil his desires. Men raced against other



men to stay ahead in the great race, as the power of the machine would be useless to strive against other men if all were to equally share it. The army possessing the most advanced weapons prevails against the one deprived of them. The lord of the machines of war vanquishes the warriors armed with mere sticks and swords, and the one securing his home with an unbreakable lock ensures the safety of his loved ones and the survival of his offspring. Machines and mechanisms therefore assume an increasingly important role in the play of love and war, continuously unfolded in man's world and occupying his mind, whether he is aware of its nature or not. The earth is used by his hand, with greater and greater control, with more sophistication, and the earthly nature of his creations is less and less perceivable, hidden behind the complexity of its parts and the diversity of materials from which they are made. His power over the earth, and through it over nature as a whole, is now unrivalled, but this comes at a hefty price: the emergence of a rift between men.

The earthly machines and mechanisms become so complex and difficult to make that very few men know how they function, and even less how to make them. Man becomes dependent upon these tools made from the earth, and he forgets how to live without them. He thus becomes helpless when their use is denied to him and may lose everything he has as result, including his life. Furthermore, the greater the complexity of these objects, the more numerous are the men necessary to make their parts, and not a single man is then able to make these things all by himself. One needs miners to extract metal and a blacksmith to turn it into ingots, a glazier to shape pieces of glass, and a carpenter for the wood, only to assemble the

raw material of a complex machine. Painstakingly trained specialists are then needed to fashion individual parts and someone who possesses a more general vision of it to assemble them. The more sophisticated the piece of machinery, the more severe the need for a whole community to make it, and the consequence of this is that the breaking of a single link in this long chain of fabrication would lead to a collapse. Men increasingly depend on their machines, and thus also on other men, becoming less able to face the challenges posed by nature when they venture outside the familiar comfort of the walls of their world. The progress on the race for the appropriation of nature therefore strengthens mankind as a group, but it may nonetheless weaken man in his individuality, en chaining him tightly to this world given to him as an inheritance and into which he was thrown at birth, and shackling him to his brethren, who provide the things he needs but do not understand.

The world we now stubbornly inhabit seamlessly marries almost every milestone of the great race for the appropriation of the earth that defines our history, in a single place, a single time. The most primitive tools, the simplest implements discovered at the dawn of mankind, remain as useful to us as they were to our cave-dwelling ancestors. From sticks to blades and wheels, from cups to chairs and pipes, the major milestones of the appropriation of the lower realm are still part of our daily life, elements present in the houses, villages, and cities, where most men spend their existence. Each one of these things of the earth, made into things of our world, represents a manifestation of the long-lasting legacy of our predecessors, those who made the earth their possession, long before we unwittingly came to be and were suddenly thrown into this strange world made with countless things, some very ancient and some freshly created. Each one of them now is the inalienable property of our crooked, old bough of the tree of life. They are visible and tangible signs of our work of appropriation of nature, and they are elements of our world that can be combined, assembled to form new things, elevating our world further. Calmly looking around us, we may see how the primitive works of our species seamlessly cohabit with the most recent and sophisticated contraptions. We may marvel at this exhibit of the succession of steps of the long race for the appropriation of the lower realm, a marathon to which our forefathers devoted a large portion of their days upon the earth, seeing the imprint of their incredibly familiar and yet wondrous discoveries and the fruits of their

travail upon our present world.

Taking an attentive look at the great diversity of items found within the walls of our homes, let us become aware of the presence of intricate assemblies of expertly-crafted moving parts forming mechanisms, especially those set into motion by our hands. The opening mechanisms of our doors and windows are probably the most common, and yet perhaps the least noticed. We use them daily, without pondering their nature, or even of the role they play in our dwelling. They transform the force imparted by our hand, from a rotation to a translation, pushing metallic pieces in or out of a frame as we turn the handle, either locking or unlocking. We may briefly reflect on the source and the destination of the strength used by this mechanism, and on the manner in which it is transformed by this gathering of moving parts made from the earth by the hand of man. It represents an artificial extension of our hands, permanently in place at this location, waiting for these hands to use it. It offers us a simple and yet extremely valuable power: to be able to deny entry to parts of our home, opening or sealing it from the outside, according to our will, preventing the winds or the stranger from passing the threshold of our dwelling and invade the privacy of this small castle whereof we are king. Observing this mechanism and its movement, we may also notice its similarity and complementarity with the hand and arm holding it, with the handle made to fit the size of a hand. Life itself is also a master mechanic, having discovered a great number of very efficient means to manipulate, transform, or redirect a force offered to it, by the earth or the sky. The complex assembly of bones and muscles forming our limbs indeed represents a stupendously sophisticated instance of such machinery of life. The arm and the hand belong to life, while the locking mechanism belongs to the earth, but both fulfill a similar purpose, and they share a common essence. The realization of this fact should lead us to see ourselves as a machine of life, not necessarily very different from the assemblies of lever, cogs, and wheels that are part of our daily life.

Venturing inside a bathroom, we may then approach the seat from which we let the dejections of our body be carried by swirling water into the labyrinthine circuitry of pipes pervading our dwellings. Opening its upper lid to reveal the flushing mechanism, if it is possible, we can now observe its functioning. Pressing the handle with our fingers, we can watch the content of the tank rushing downward, liberated from its porcelain prison by the opening of an aperture, taking away the offering to the earth left in the seat into the depths

of the pipes, forming a whirlpool before the mechanism interrupts the flow and the ceramic vessel is finally once again filled with the transparent liquid. Here, the force of our hand triggers the piece of machinery, but the main force at work is not our own. The flowing movement that carries the content of the bowl, and also plays a role in the action of the mechanism itself, is initiated by the omnipresent, downward pull of the earth itself, by nature rather than the hand of man. Through this mechanism, we merely harness the mysterious force of the earth, using it to wash away our filth, to clean our squalor, subjugating this arcane power to our branch of the tree of life, being an element of our world. Parts made of earth are assembled to exploit the ubiquitous force of the earth, as a display of the success of man's ingenuity in his appropriation of nature. Watching this seldom considered invention in action, we can let our awareness of the nature of these objects present in our life gradually grow, seeing their bond with ourselves and with the earth, revealing a new aspect of the nature of our world, so familiar that we have become blind to its extraordinary, its "super-natural" essence, as something that transcends nature and stands out of it.

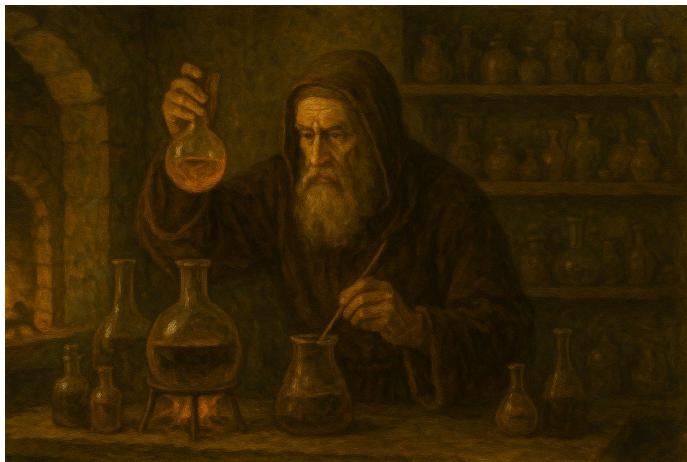
Mechanisms and machines now occupy a prominent place in our daily lives, with some of them crude and ancient, while others are complex and modern. We learned to use many of them during our first years in this perplexing world, and all along our lives they help us to render our world more convenient, more practical, saving us a considerable amount of time and efforts, and empowering us so that we may rise high above our fathers, dwelling in a more advanced world, that is, one with a higher level of appropriation of nature. This great march of appropriation nonetheless does not necessarily lead to a greater understanding of man's environment. Surrounded by innumerable machines and mechanisms made by a small cohort of specialists, masters of their art, most men lose sight of the nature of the items they use, parts of their lives. Many are utterly ignorant of the principles upon which they were made and would be unable to fabricate them, even if their life depended on it. Looking around us, we may notice the presence of such "black boxes" of the world, things whose inner workings are invisible to us, and whose nature remains obstinately obscure to the uninitiated. We gain a profound awareness of the extent of our ignorance, of our helplessness, humbly recognizing what would our existence be without these complex and sophisticated pieces of machinery, laboriously made by other men and generously offered to us. The unrestrained, frenzied construction

of the world obscures the truth of nature from us, the essence of the earth, life, and the sky that lies beyond the frontiers of our civilization. The still ongoing complexification of our world now also begins to lead us to lose touch with the very nature of this world, what was made by our forefathers in a distant past and by our skillful brethren, more recently. We may therefore attentively contemplate the value of these elements of our world, parts of our life, and concerning the most indispensable of them, we may try to learn their nature, their functioning, and become acquainted with their relationship with us or nature. We may thus perhaps begin to re-appropriate this world into which we are thrown, rather than let ourselves be progressively enslaved by our blind reliance upon things we do not understand, whose nature we cannot grasp. We should now become able to conscientiously observe our world, being mindful of the nature of each thing forming it, as only then may we genuinely appreciate its value.

1.11 The Chemical Reaction - Transforming the Earth

Nonchalantly but meticulously, man explored the earth to grow more acquainted with its nature, its craggy surface as well as its dark depths, increasingly seeing it as a formidable reserve of precious materials he could use as building-blocks to further extend his world. The more thorough his knowledge of the earth, the larger the palette of materials from which he can create new things, as he discovers new parts of the realm under his feet, new substances with unique properties allowing him to increase his domination of nature. From clay to iron, from limestone to diamond, the shadowy body of the earth is filled with an incomparable wealth, selflessly offering itself to man, who can plunder it at will, without the slightest resistance, leading him to unceasingly wound the delicate skin of the planet, scaring it with his tools, utterly blind to the nature of his actions, too drunk with the power of his hands and mind, always craving more. By mere chance, or as the result of an acute curiosity, man nonetheless one day discovered that the materials offered to him by the earth only represent a meager sample of the remarkable riches of nature, mere ingredients that, when adequately transformed and mixed with one another, could form the precursors of an almost infinite range of substances, many of which endowed with properties not seen in any other, substances that could, in turn, be used to fashion new things.

The first step taken by the investigators of the earth who lived among our ancestors thus was to create things by shaping the substances offered to them by the earth. A second step was then taken, as they began to use the treasures buried in their land to create new substances, new materials, rather than simply impart a shape to those created by the earth, or by the dead star whose remnants became the earth itself. The beginning of this new stage of man's relationship with the earth will probably forever remain concealed, as many of such works of transformation would not have left any visible and durable traces, but we know that at the dawn of our history, some of our forefathers already discovered ways to creates new substances, even though they did not understand the nature of the reactions involved. One of the first of these works of transformation nonetheless not only involved the wealth of the earth but also products of life, reclaimed by man as they left the living to become dead matter: soap. Used first to clean wool and fabrics, soap is the



result of a series of reactions. The first involves the creation of lye, a substance made by boiling the ashes of hard woods in water. The lye is then boiled together with the fat of animals or oils extracted from plants, and as the two substances react with one another, they then form a third, whose properties significantly differ from those of both its ingredients, and thus was soap invented. Parts of life, reclaimed by the earth, are therefore used to create new substances. Lye is highly corrosive, destroying the skin of living beings, while oils coat their skin and are insoluble in water, making it difficult to wash away. Brought together by fire, the two nonetheless create a substance that dissolves the filth on our body as water takes it away effortlessly, leaving our skin and hair immaculate.

Long after the mastering of soap-making, and after a systematic exploration of the nature of the substances found in the earth, man finally began to have a clearer view of the nature of the lower realm. Wielding the power of the flames, capturing the vapors escaping in vessels of glass while substances were subjected to their heat, the investigators of the essence of the earth, slowly but patiently, one by one pierced the secrets of nature. They explored all possible combinations of substances, submitted to different forces, different pressures or temperatures, meticulously documenting the results and rigorously collecting the products of their experiments, trying to find ways to use them for the edification of the world, to create new things or improve existing ones.

Man's knowledge of the earth then grew considerably, as he now not only appropriated it with his hands, possessing earthly materials and using them, but also began to fathom the inner workings of the

earth, the invisible structure of its infinitely small building blocks. The earth then ceased to be a giant mass made of various substances exhibiting different colors, texture, and behaving differently according to the forces applied to them, by nature or the hand of man. It became a gigantic puzzle made of lilliputian atoms and molecules, bound together according to certain forces of nature. Man's senses remained as they were at the dawn of his kind, but his mind now saw the earth under a new light, with an incredibly higher resolution.

Even endowed with an extremely detailed view of the earth, man's appropriation of the substance of the lower realm nonetheless remains surprisingly reliant on the whims of fate. He attempts to create new compounds, but he seldom knows what will be produced without prior experience. The properties of his creations are determined once they are made, as he is largely ignorant of the relationship between a substance and its real-world properties before he performs experiments. What he discovers may therefore be seen as much as yet another gift of the earth rather than true creations, *ex-nihilo*, as he puts pieces of the gigantic puzzle formed by the earth together, hoping that some of them would form meaningful pictures, but he at this point cannot paint pictures by himself, pouring out his imagination and incarnating it as an earthly material.

As man's knowledge of the earth is deepened, he should therefore know how insignificant is the level of control he exerts on its essence. What it shows him is also that the boundaries between the things of his world do not necessarily reflect the truth of nature. According to the experience given to him by his senses, the contrast between earth and sky, land and air, could not be starker, and yet the experiments of the investigator of the earth show him that the frontier between the realms of nature may not be as clear-cut as his senses lead him to think. Gases like hydrogen and oxygen can be combined and form water. The contact of sodium metal with water produces gas and fire. Earth can be turned into air and air into earth, if one knows the adequate elements and how to combine them. Man thus plays with the earth and the air as with a puzzle, blurring the line between the two as his knowledge steadily increases.

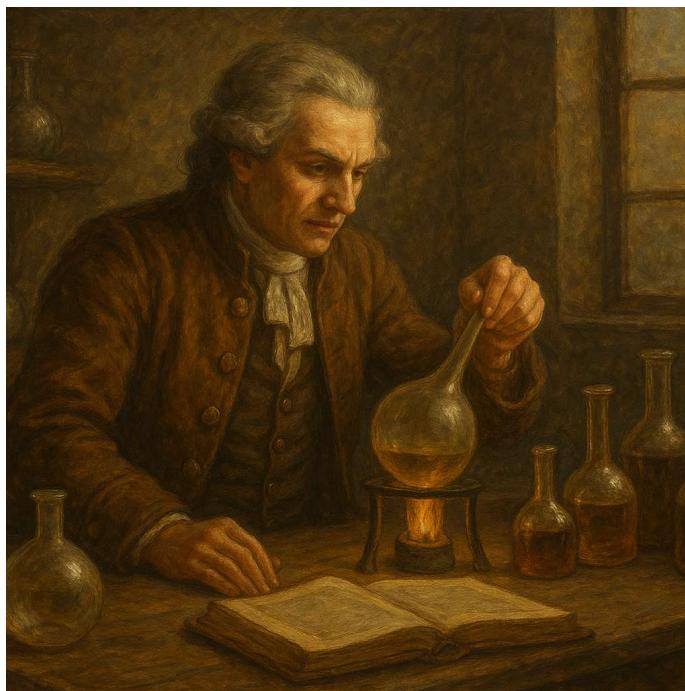
Allying chance with strenuous efforts of the minds and the hands of entire generations of investigators of nature, new materials were thus brought into man's world. From the concrete of which our walls are made to the pills that save our lives when we fall gravely ill; from the paint coating our buildings to the clothes covering our flesh, the

advent of synthetic materials has profoundly altered our environment. Perhaps the most impactful reaction remains the fortuitous discovery of plastics, derived from oil, extirpated from the depths of the earth but which nonetheless was formed by the decomposition of living things, entire forests and herds of animals reclaimed by the soil ages ago and turned into a sooty liquid. Omnipresent in our world and unlike any other substance found in nature, these plastic materials are light, cheap, easily shaped with heat, and incredibly durable, making them a substance of choice to build countless things filling up our world. The durability of this material nonetheless marked a turning point in the relationship between man and nature.

The continuous work of the earth and the sky, patiently returning the wastes of our world to the earth, is indeed considerably slowed down by the new materials. The plastic wastes littering our world resist the putrefaction initiated by most microbes affecting life, the corrosion caused by exposure to the air affecting metals, or the erosion caused by the rains and the winds, all the forces crushing down the things of the world left at the mercy of nature, bringing them back to the depths of the lower realm, slowly erasing the mark of man's hands upon the earth. With a greater power over nature, man must now begin to seriously ponder the question of its preservation, as his world still rests upon the earth and is bathed in the air filling up the sky. Uncontrollably changing the essence of the earth, he may cause it to be irreparably damaged, thereby not only threatening nature itself, but also his own existence, the tree of life as a whole, whose fate is bound to it.

The appropriation of the substance of the earth inevitably leads to a greater alienation of man from the truth of the lower realm, as the world he inhabits offers fewer and fewer reminders of the earthly origin of the things found in it. The wooden pieces of furniture are coated with opaque paint of unnatural colors and resins, concealing their origin, as pillars of the forests reclaimed by the earth. The soil of the cities is covered with asphalt, veiling it to the eyes of men. Machines made of iron are hermetically encased in plastic shells, hiding their bond with the depths of our planet, preventing the air from entering into contact with their innards. Man's world grows increasingly separate from the earth and the sky, being slowly sealed off from nature, which only becomes a storehouse, a repository of resources, accessed only by those in charge of pillaging it.

A further alienation nonetheless also takes place, one between



man and his world itself. The alienation initiated by the complexification of man's earthly inventions, mechanisms and machines in particular, is considerably increased by the appropriation of the substance of the earth, by a few investigators of nature. Most dwellers of the world indeed grow increasingly ignorant of the nature of this world, as they do not know the origin and nature of the innumerable substances with which the things around them are made, even less than they fathom the functioning of the machines that are part of their daily lives. When this appropriation of the substance of the earth began, many participated to this activity, and a non-negligible portion of the men of the antiquity may have known how to fabricate soap in regions where it was used, for example. This would hardly be the case with most of the things we use today. How many among us would be able to make the paint coating our walls, the plastics encasing our devices, or the bleach with which we clean our homes? The empowering of mankind by the race for the appropriation of nature therefore comes with a weakening of most of the world's population, with a select few possessing parts of the knowledge of our kind, and none possessing it in its entirety, binding our fate tighter and tighter to the one of our brethren, without us examining where we are headed.

Stark is the difference between the brutal architecture of our metropolises and the harmoniously arrayed landscapes offered by nature, the serene scenery of the open country, with snowy peaks and grassy slopes illuminated by the rising sun, wide waves calmly rolling on shores covered with pristine white sand, or deep canyons carved in the rocky, barren soil by meandering rivers pulled down by the earth. And yet, the giant glass columns piercing through the clouds made by our hands, the colorfully painted vehicles racing through the asphalt-covered streets, or the sophisticated, addictive devices held in our hands are all made of the same essence, shaped with the same earth, only bearing the traces of the intricate work of our hands concealing their earthly nature behind the veil of their usefulness in our world. Observing these things made with great efforts by the strong and agile hands of our brethren, here all around us, we should recognize our ignorance of the nature of the substances with which most of them are made. We know they come from the earth, and that their essence belongs to the lower realm, but we ignore how the earth was turned into these elements of our world. Carefully touching them, feeling their unique texture, shape, and aspect, we can only imagine the tremendous complexity of the processes involved in their manufacture, completely concealing their earthly origin.

Seized by a desire to recover our lost bond with the truth of the earth, let us now, with our eyes and hands, enter into contact with things whose material is easily identifiable, simple items made of wood or stone, and let us see the earth in them, as we have seen fallen trees and blocks of stone when we ventured into the countryside, where the traces of our hands are less ubiquitous. Those among our brethren who are skilled in the art of the transformation of the earth used their knowledge of the lower realm to produce these mysterious substances surrounding us, piercing through the appearance of things to reach the earthly essence of all these parts of the world that we can touch, experiencing them with our senses.

If we throw a glance around our home, most of us may swiftly be struck by the prominence of plastics, used as a shell for many of our devices and machines. Observing the omnipresent material, one of the most impressive results of the meticulous work of illustrious masters of the art of the investigation of the nature of the earth, known as "chemistry," we can immediately recognize how unnatural, how artificial it appears to the fingers as well as to the eyes. We

should nonetheless remember that each piece of plastic is a remnant of past living things, unhurriedly reclaimed by the earth before they fell into the hands of experts of the transformation of the earth. Touching these objects, we may see in them the incredible course taken by their substance, from life to the depths of the earth, and now part of our world.

Once part of immense forests, the result of the meticulous weaving of light with air and earth, the bits of plastic matter in our hands slowly saw the fire of life burning them and burning inside them be extinguished, as they were covered with dust, ashes, or water. Devoured by the soil, the work of the skies, the passing of time, then slowly turned them into a murky liquid, as most of the bonds between the molecules woven by life were ineluctably loosened, resulting in the formation of oil. Extirpated from the obscure depths of the earth with heavy, metallic machines, this oil was then turned into a palette of substances, submitted to intense heat, unbearable pressure, and put into contact with other substances with which these would react to form other compounds, among which are the plastics. Heated and energetically pressed into molds, they now form an important part of our world. Most of the bottles from which we drink, the pens with which we write, or even the clothes we are wearing, most of them have been wrought from these heavily transformed remnants of life, cadavers of our most distant forefathers and cousins. Considering their ubiquity around us, we may feel deeply grateful and heavily indebted, firstly to the living things whose corpses now form one of the bases of our world, as they turned light, air, and earth into complex substances forming their bodies, and secondly to the scrupulous investigators of the earth, who spent their life to appropriate the crust of our planet and offer mankind these inestimable gifts making our existence more comfortable.

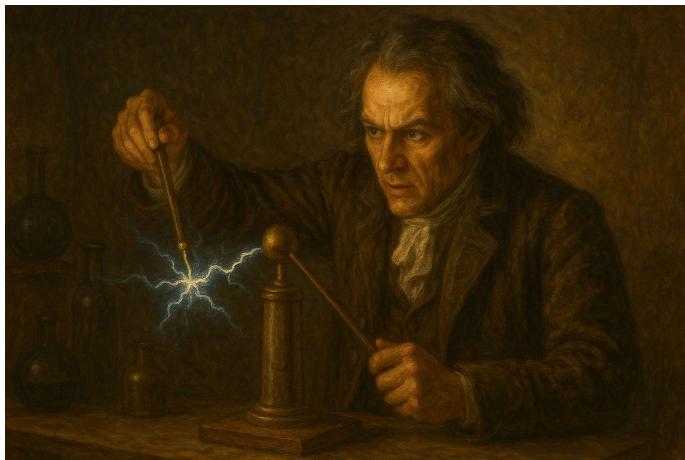
Inconspicuous and yet omnipresent are the substances discovered by our kinsmen. Simply observing our lavatory, we can see the presence of cleaning products, made from substances found nowhere in nature. How efficiently would we clean ourselves and our dwelling place without these products of man's appropriation of the earth? We may thoughtfully consider the impact of these new compounds upon our lives, upon our bodies, and upon our world, how profoundly they altered our daily life in just a few generations. We may nonetheless also remember that our branch of the tree of life, for most of its existence, lived from the raw earth and upon the naked earth, without the need to transform it. Our bodies were patiently

fashioned to live upon its coarse, bare face, immersed in the magnificent but unforgiving open country. These things around us protect us from the ubiquitous dangers of nature and they offer us comfortable days, but we should remember that they also alienate us from the truth of the earth and the sky, enshrouding nature behind a thick and opaque drape of complexity, ignorance, and convenience. Therefore, let us now step out of this man-made world, to rediscover the unadulterated essence of this earth, conquered by our species but nonetheless lost in the process.

1.12 The Electric Circuit - Powering with the Earth

One cannot appropriate something whose very existence has yet to be known. Man therefore has tended to believe that his appropriation of the earth was complete, as he mastered a wide range of techniques to deeply transform its essence, creating scores of new substances that would help him fulfil his every desire. Since the dawn of his investigation of the nature of the lower realm, he nonetheless occasionally stumbled upon mysterious phenomena, pieces of evidence of the fact that he remained oblivious of certain aspects of the earth. Rubbing a piece of amber, that is, a block of sap hardened by the work of the skies, against his hair or the fur of an animal, he discovered that a strange force seemed to possess the translucent, golden block, attracting hairs to itself, making them seemingly magically follow it, even without direct contact. In different parts of the world, other pieces of evidence of what appeared to be a similar force affecting the earth were discovered. Lodestones floating in a liquid would be found to always point in the same direction, and it was found that certain species of fish could shock or kill other creatures at a distance, using an unknown force. For a long time, these phenomena remained mere curiosities, having hardly any impact on man's world, serving only as a reminder of the fact that the earth obstinately kept some of its secrets, a part of its mystery. Intrigued by them, and perhaps arrogantly refusing to see a part of the lower realm remain out of the reach of their mind, seeing a force of the earth left unexploited for the edification of their world, the investigators of nature deepened their inquiries and finally obtained some results.

Two forces manifested in the earth were identified as a result of long inquiries. The electric force, that is, the force of the amber in the Greek language, was then distinguished from the magnetic one, shown with the lodestones, even though the two would later be described as two facets of a single one. After numerous experiments, the tenacious investigators of nature found out that certain assemblies of earthly substances could invite the release of an electric force, in the form of a current flowing through particular materials. If a piece of brine-soaked paper was placed between plates made of copper and zinc, a continuous flow of electricity could be observed between the plates. Such rudimentary devices were then refined, and man began to be able to treat this force as a commodity, something



that could be produced, with the movement of a wheel producing a magnetic field inducing an electric current for example, and stored inside batteries filled with special solutions, strong acids in particular, showing how the previous steps taken by man on the great race for the appropriation of the earth, such as the wheel and the furnace used to extract metals from the earth, can be combined and lead to further discoveries.

Used together with certain products of man's work of appropriation of the other realms, such as motors, electricity then truly made its entry into our world, being after long and intense efforts finally appropriated by mankind, as it was turned into a wealth, a source of energy that could be used to replace the strength of man's muscles, the efforts of the living, freeing them of the back-breaking burden of some types of manual labor and opening up a whole new realm of possibilities for his world.

Another important step forward was then taken, as the investigators of nature discovered that the essence of the electric force was linked with the essence of the earth itself, of matter as a whole, and not just limited to amber and a few select materials. This force was found to be mediated by electrons, particles that are inherent parts of all the elements found buried in the earth and floating in the air, normally bound to other particles and thus seeing their force neutralized. From now on, man nonetheless knows that this mysterious force is present in even the smallest speck of earth, stored by the lower realm, waiting to be released and harnessed by the hand of man, shedding new light on the basis of his world, which he thought that he knew and had appropriated completely.

Electricity offers a stark contrast with the major force affecting our world, the downward pull of the earth, with which man is the most familiar, as contrary to the latter, which reaches anything close to our planet, ineluctably taking down all that is found in its vicinity, no matter of what substance it is made or where it is found, the electric force was found to be very localized and greatly affected by the nature of the material of the objects found in its reach. An electric current will, in normal conditions, only flow through certain earthly materials, such as metals or water. Only as the result of an enormous tension, the pressure of this flow, can it pierce through any material, the most common example being of course lightning, which represents a brief but extremely violent outburst of electricity shooting through the air, which normally does not allow such flow. This peculiarity nonetheless presents great advantages. Contrary to a flow of water, a flow of electrons can easily be contained inside a circuit made with metallic wires or tracks, allowing extremely fine currents to be precisely controlled, and intricate assemblies to be created.

Once the question of the production and storage of electricity was solved, came the question of its applications. Creating an imbalance, a tension, between different parts of an electric circuit, with one side exhibiting a greater accumulation of electric force compared to the other, man can cause a flow between them, and like a watermill, the energy imparted on this flow can be harnessed for other purposes. One of them is to move earthly objects, through the induction of a variable magnetic field that causes a wheel to rotate, inverting the process that was first used to produce electricity. This invention allowed man to use the force of the earth to set into motion machines found in his world. Man, at an earlier point in his history, used the currents of rivers to move watermills, ingeniously exploiting the energy of the water pulled by the core of the earth, but now he can directly draw energy from the earth itself, releasing the force stored in the form of bonds between the smallest bits of earthly matter, invisible to the naked eye. The earth can now breathe a semblance of life into machines made by man's hands, making them move and stand out from the rest of the earth, immobile and unchanging at the scale of man's life, and it can do so at a distance, even at the other side of the earth, requiring only a wire to deliver this flow of earthly energy. Conversely, man can accumulate and store his own strength into the earth, by using the movement of his arms to charge an accumulator, filled with substances more

likely than others to welcome an electric current, a strength that then remains available, stored inside an earthly material, ready to be used at a later point.

The new form of energy drawn from the earth thus begins to flow into man's world, running through a complex maze of metal wires and tracks. Man begins to accumulate and trade this force, increasing the power of those capable of appropriating this new facet of the earth, and weakening those left behind in the great race. The visible manifestations of the forces of nature are all exploited to produce this new invisible wealth, with the flow of rivers constrained or the heat of the fiery depths of the earth exploited to set turbines into motion, to power machines that fabricate the things of our world, and the devices that facilitate our life or entertain us in our homes. The various materials forming the earth are also studied to determine the best ways to store and release this treasure buried in the earth, with man discovering uses for the so-called "rare earth elements," which were crucial for the progress of the storage techniques of this force.

Man already for a long time found ways to use the forces of nature to perform work inside his world, but the advent of the electric force represented a giant leap because, for the first time, energy could be traded like objects, parts of the world, and channeled precisely through a network of thin wires going through cities, in the same manner that running water was brought into them. Moreover, man quickly discovered that this strength from the earth could be used to control other aspects of the earth and the sky. An intense flow of electrons indeed produced heat, leading to the creation of a multitude of devices, many of them rendering the use of a hearth obsolete, such as ovens and radiators. Conversely, our predecessors also discovered that the electric force could be used to remove heat and produce cold, using the earth as a weapon to counter the effects of the sun, something that had never been done before and offered man a greater control over nature, allowing him to dwell in parts of the earth that would previously have been too inhospitable, thereby appropriating new parts of the earth as he deepened his knowledge of its nature.

The appropriation of the electric force nonetheless had consequences reaching beyond the lower realm. As will later be seen, it also played a crucial role in man's appropriation of life and the sky, as air and light, with electric appliances stirring up air, producing



sounds, and becoming sources of light, among countless other uses. It even slowly became a foundation of our world, as earthly devices into which electric current was poured began to be used to store information, things of the world that transcend the earth and the sky, being timeless and immaterial in their essence, encoded by series defined by the presence or absence of an electric charge. Man's knowledge then began to be stored into the earth, linked with the electric force, allowing him to transport information effortlessly and almost instantaneously, using an intricate web of copper wires running throughout his world. The capacity of electricity to run freely through this web, as energy or information, gives man easy access to both, but this convenience nevertheless only increases his alienation from nature, as the last remnants of the raw experience of the earth gradually disappear, replaced by machines moved by electrons, such as the hearth that for most of our history was the center of our homes. His alienation from the nature of his own world also becomes more severe, as he no longer sees the source of the energy that he uses daily. Coal and wood have vanished from his daily ritual, and the watermills of the nearby river now lie in ruins, as all his needs are fulfilled by a copper wire, without him knowing from which source is this force drawn, remaining oblivious of the nature of his world.

Man may nonetheless be proud of the work accomplished by his branch of the tree of life. Long has the road traveled since the welding of the first tool been, and many efforts have been spent by our ancestors to offer us this world. They conquered the earth and allowed us to counter the threats it presented to our survival. Far from denying the precious nature of our inheritance, the incredible

value of this world built by man's hands, we may nonetheless enjoy frequent visits to the open country, to let ourselves once again feel both the incomparable beauty and the fearful nature of the earth, the blessings and dangers that come with living at its mercy, submitting ourselves to the whims of nature. We may then truly appreciate what has been won from the earth by our ancestors, through sweat, tears, and blood, by the entirety of our bloodline.

When we think of the strength of the earth, most of us will think of violent volcanic eruptions, the thunderous roar of colossal waves crashing on jagged shores, or the terrifying tremors of the soil that can topple the highest constructions of our world. Unable to perceive the nature of the earth or the scale of the elements forming it, as minuscule particles invisible to our naked eyes, we naturally fail to recognize the electric force that powers large sections of our world and that occupies an important place in our daily lives as a fundamentally earthly one. Wearing clothes made of wool, we all witnessed how they attract our hair and may even produce electric discharges tingling or skin and emitting small arcs of light, and we thereby were given a hint of the presence of this furtive force hidden in all matter. Touching an object with our hand, feeling its hardness, its resistance to the pressure of our fingers, we may now realize that it is because of the presence of peculiar, fuzzy specks of earthly matter, electrons, on both our hand and the object, with these particles repulsing each other, that this sensation of touch is possible. These energetic particles are what resist and prevent our hand from going through the object we seized. Strongly bound to other kinds of grains of matter, each one of them forms a minute reserve, a jar of energy waiting to be opened, to release its content, and to play a part in the unfolding of the great play of our world. Every single time we touched something, we merely experienced the repulsion between the electrons of our bodily envelope and those of the surface of what we entered into contact with. We should therefore consider ourselves as familiar with the electric force as with the other major one that involves the earth, the great pull that takes all things downward, toward its ardent iron core.

The strength of the electric force concealed within the earth nonetheless remains largely out of the reach of our hands. We rely on the labor and ingenuity of our fathers and brethren to benefit from it, tapping into this seemingly inexhaustible spring of energy

as it comes into our home through a copper cable. We may take a glance at the way this invisible river of electrons flowing in from the outside is split into smaller brooks, with branching wires running in different directions, meandering along the walls and entering the inner part of our devices and appliances. Observing our dwelling place, we may now pay attention to the nature of the things of our world powered by this stealthy flow of electrons drawn out from the body of the earth. What is their function? Upon which realm of nature do they act? Some of these objects may be designed to allow us to resist the hardships of the winter, when our land is swept by violent gusts of frigid air, turning the invisible flow of electricity into a torrent of warmth engulfing our home, while others may protect us from the relentless onslaughts of the envoys of our star during the summer, by blowing a fresh breeze on our sweaty skin. Some are used to roast and to bake, using heat, while others keep our food cool or frozen, preserving it from putrefaction, the threats of minuscules living things. Experiencing with our senses the alteration of our quarters brought on by these appliances wielding warmth and cold as tools, let us appreciate the control they offer us, allowing us to stand up to the challenges given to us by the earth and the sky, a luxury we often forget, as without them we may be condemned to die shivering from the cold of the winter, or suffocated by the scorching heat of the summer.

Contemplating the maze of serpentine wires and cables pervading our home, we may also recognize the presence of a chasm between us and our world, as this web of metal and the things of the earth through which the river of electrons flows are largely unknown to a majority of men. We make use of these tools. We benefit from the knowledge of other dwellers and builders of our world, but we often remain oblivious to the nature of these objects. We ignore the source of the river itself, whether its strength comes from the depths of the earth or from the heights of the heavens, and we fail to understand how this flux can be harnessed to serve us. The more complex the machines, the higher the world is built, the more the uninformed inhabitant loses touch with its nature, remaining a passive user of a world he can no longer grasp, while it also hides the truth of earth, life, and the sky behind a wall of incomprehensible things.

The electric force should nonetheless not appear foreign to us. Letting a small quantity of electricity flow through one of our limbs, we may experience its impressive effect upon our body, causing our muscles to contract spasmodically, without us having any control

over this movement. This experience is only a manifestation of the crucial role played by this cryptic force in our body. We ourselves are pervaded by an astonishingly complex web of nerves playing the same role as the wires in our home, carrying signals in the form of electrical impulses. Our brain is a gigantic maze of such nerves interconnected with each other, with continuous waves of impulses propagated inside it, powered by the food we ingest and the air we breathe. Seeing the web of wires running through our cities, we may therefore see them as yet another way by which we extend our body, as we ourselves are animated by the same force, which at every instant is manifested all over our flesh. Closing our eyes and touching our own skin, let us appreciate the presence of such impulses running through our nerves, offering us a peculiar vision of this world we inhabit.

Chapter 2

Appropriating Life

Life is a phenomenon rather than a substance. It bewitches the substance of the earth to propagate itself and grow like a germinating seed, then slowly turning into an imposing tree with numerous boughs. Each branch made a part of the earth its home, letting itself be shaped by the earth and the sky, exploiting their resources for their survival. The living things harnessing the light of the sun to power their work of transformation of the earth and the air into living things support the beings unable to exploit the energy of the daystar, including us, who rely on plants and animals for our sustenance. Compelled to play their part in the play of love and war by their very nature, living things almost ineluctably compete against one another, and this has been an important factor driving the growth and refinement of life, from lone chains of molecules reproducing themselves in the sea to the colossal assemblies of innumerable cells working in unison to form complex beings like us. Appropriation is thus in the nature of all living things, as they were mercilessly selected by life for their ability to exploit the earth, life, and the sky to prolong their days and pass on their legacy to a new generation.

Man thus strives to appropriate other parts of life, just like they try to appropriate him. He sees the living things around him not only as his brethren and distant cousins, parts of the gigantic tree of life to which they all belong, but foremost as resources, as meat to be eaten, as materials to be turned into tools or clothing, or as a source of energy that can be used to power the extension and elevation of his world. At first indiscriminately extinguishing lives,



man soon realizes that the incredible efficacy of his appropriation of life threatens the very existence of the branches upon which he depends, and he is thus forced to become a gardener of the tree of life, trimming reasonably, preserving this source of resources he needs to survive and prosper. Even men do not escape being appropriated by their brethren, who use their lives as a commodity, utilizing their bodies and mind to amass wealth or power, and thereby gain a more prominent role in the play of love and war.

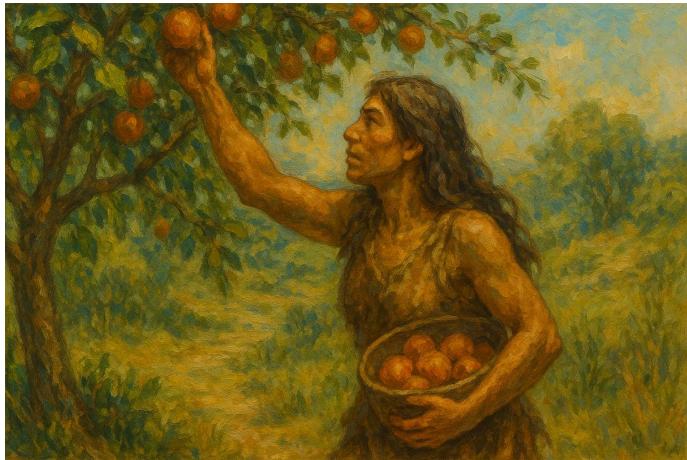
Running the race for the appropriation of nature, man submit the tree of life to the yoke of his world, blinded by lust for the satisfaction of his instincts, his will to be a diligent actor of the great play. Through mankind's (hi)story, some nonetheless have struggled to resist such urges, seeing themselves as fully part of the tree of life, and other living things as parts of the whole their form, part of themselves. When they have to extinguish life for their survival, they do so with respect for what they take, conscious of the price that every day of their existence upon the earth is costing to life.

2.1 Gathering - Amassing Life

The will and capacity to appropriate life is not man's exclusive privilege. The birds of the air scrutinize the earth to seek worms driven to its surface by the rain, ingesting them to sustain their bodies. The fish of the seas feast on the tiniest creatures carried by the currents, and the great apes of the forests rely on the succulent fruits hanging on the branches of trees to grow and grow old. If their ancestors survived and thrived, it is because they were able to appropriate other parts of life, what was not them, mostly without learning it as a result of an experience, but rather instinctively. Among the random behavior etched in the nature of their branch of the tree of life, as nervous structures and impulses, those who exhibited patterns of behavior allowing them to successfully appropriate other parts of life survived and fathered an offspring, whereas those who did not withered from the tree of life. The continuous work of the play of love and war shaped our nature and thus gave us the means to make certain parts of life our own, without us learning this skill, but rather receiving it as an instinct carved in the deepest part of our mind.

The first men, like their more distant ancestors, were therefore brought into this world with hunger and thirst taking hold of their flesh and their mind, desperately crying for food and water, knowing how to satisfy these cravings as soon as their mouths enter into contact with their mother's breasts, drawing the precious liquid with the force of their lips, without this having been taught to them. It should be noticed that the infant is therefore not a mere passive recipient of his sustenance, poured into his mouth by his parent. He rather extracts it by suction, himself showing his will to live, and an ability to take what he needs, appropriating the body of his mother to prolong his presence on the earth, his existence as part of life. As the infant turns into an adult, the instinct of the living is nonetheless slowly completed by the knowledge of his world. Unlike the beasts of the land or the flying creatures of the sky, man indeed grows up in a world filled with knowledge inherited through tradition, passed on from generation to generation, not through a reproduction of the body but rather through teaching and learning.

An ape will pick up fruits on a tree with his hands and promptly eat them when he is hungry, responding to hunger by seizing their flesh. By doing so, our distant cousin appropriates the fruit, but he



is also being appropriated by the tree itself, without him having the faintest awareness of this fact. The tree indeed evolved such succulent appendixes, tailored to please and satiate creatures like apes, so that animals would ingest their seed and scatter them, ensuring the extension of their dominion upon the dry land. In this case, neither of the living beings involved has any notion of the nature of their relationship, of the interweaving of their respective branches of the tree of life, one depending on the other. Man, on the other hand, at some point began to do more than simply obey the cravings of his body, being blindly lured to serve the trees as he ate their tasty fruits. He began to investigate every branch of the tree of life, exhaustively determining which one could be useful to him, not only as food but for any purpose, with each inquiry producing knowledge, becoming part of his world.

Seeing the breadth of the tree of life, man therefore ceased to limit himself to eating the fruits made to please his palate and invite him to scatter seeds. He tried to taste various leaves and roots, mushrooms and tubers, exploring the land and the seas with his tongue and his stomach. Some sacrificed their lives so that their brethren and descendants would acquire a deeper knowledge of life, as many living things were found to be poisonous, with some plants having evolved this lethal nature as a means of protection. Man thus first gathered knowledge of the tree of life, before gathering food itself. One by one, each branch was identified, localized, and tasted, with man splitting the tree of life into parts, separating the edible from the inedible, the useful from the useless, the poisonous from the inoffensive. Painted inside his world, some of it with blood,

a picture of the tree of life was thus patiently refined generation after generation. Life as a whole was introduced into his world, and he began to appropriate it.

The appropriation of the tree of life by man nonetheless is not limited to the plundering of its fruits. Once something becomes yours, it becomes natural to care for your property, and not simply use it without regard for its condition. Appropriating life therefore means to ensure its survival, and thus the discovery of its value. Man learns that an unrestrained exploitation of a bough of life may lead to its withering and disappearance, depriving man of its fruits, and he therefore is forced to learn good measure as he uses life to support his existence and his world. Life is now his, and he must learn to properly manage his property or otherwise see it vanish. This means not taking more than what a branch can afford to give, and not hindering the participation of these branches in the play of love and war, allowing them to reproduce and extend their existence.

Endowed with the knowledge of life handed over to him by his ancestors and brethren, man thus learns to treat the tree of life as a wealth that produces fruits if well managed. The branches of life that are deemed useful become a commodity, something that can be accumulated, stored, shared, or traded. These things represent storehouses of the fuel of life, with each berry, each nut, or each leave being a vessel of nutrients, containing substances that allow the fire of life to continue burning within his chest, preventing his return to the earth, the great body of death. Holding a handful of grain in his hand, this represents a few more days over the surface of the earth rather than under it. He begins to see the length of his existence linked with the amount of food that he possesses, feeling a sense of security as he contemplates a pantry filled to the brim with the bountiful gifts of life, knowing that starvation, the most direct threat to his life, is no longer a danger for the foreseeable future.

Man therefore first appropriated life by gathering, not only following a mere instinct but consciously and systematically making the tree of life as a whole his possession, rigorously examining what he could do with each one of its branches. As a result of this appropriation, the resilience of man considerably increases, as he can now withstand the uncontrollable rage of the heavens, the dreadful summer droughts parching the green vestment of the earth as the sun pour out its brilliance with all its might, or the harsh winters, when the forests are engulfed in snow and life desperately wrestles



with death. The glorious coming of the spring is marked with celebrations, as life once again flourishes upon the face of the earth and man can once again feed on freshly ripe fruits and countless gifts of life, while the arrival of the winter inspires dread, leading to careful preparation, with food being stored for the dark months.

With bowls of wood, wicker baskets, or simply their bare hands, men, women, and children thus stroll on forest paths to collect berries. After a rainfall, they examine the decaying tree trunks on the ground and pick up mushrooms that they know will become sources of life rather than death, and when the crimson leaves of the fall cover the ground, they shake the branches of the walnut trees, one by one amassing the hardened shells hiding edible treasures, while others break away pieces of honeycombs, robbing the bees of their golden nectar and pouring it inside earthly vessels.

Jealously kept away from the critters crawling on the earth, the invisible molds floating in the air, or the insects roaming the sky in search of their sustenance, what has been gathered is stored within receptacles made of earth, themselves hidden inside walls, in the body of the lower realm like in a vault. These victuals may then be shared between members of a family or a tribe, allowing them to enjoy a greater variety of food, and thereby have a better health, strengthening their branch of the tree of life.

The cascade of brilliance falling down to the earth from the fiery fountainhead of the heavens soaks the tree of life with light, and this blazing downpour is patiently collected to allow its un-

hurried growth, its branching and budding, its extension toward the luminous source, as an expression of gratitude for its existence. The emerald leaves adorning the forests of the dry land and the weeds floating in the shallows of the oceans unceasingly and selflessly weave this radiant flow to inflate the great body of life, spread between earth and sky. Many animals, in turn, voraciously feast upon these weavers of light, and others, blood-thirsty ones, feed on their juicy flesh, unrestrainedly gorging themselves with the work and the substance of these creatures. Beholding a luxuriant part of the open country as the great luminary shines above it, a place where the traces of the hands of man are faint and seldom noticed, while new facets of the splendor of life appear at every step we take, we may contemplate the grand spectacle of life. Looking at the leaves delicately balanced by the breeze or at the elegant dances of the countless blades of grass, we are the proud witnesses of the growth of the tree of life, with soil, light, and air savantly combined into new living cells, all part of the same chain reaction that began as a single seed in the ocean and now covers the planet. If we live today, it is because of their labor and of their sacrifice, as they passively offer themselves to us, allowing us to eat their fruits, and their substance. Our being rests upon these humblest forms of life, and we may thus gratefully recognize what we owe them.

Walking through the least trodden trails of a forest, meticulously observing the variety of the branches of life sheltered under its canopy, we may also be able to identify some of the fruits of life. Let us ponder the extent of our knowledge of these plants or animals. Are they edible? What would their taste be? Perhaps more important than the answers to these questions themselves is the question of the source of this precious knowledge. We have not eaten and tasted the large majority of them ourselves, and yet we have learned from other men to distinguish those that may sustain our body, those that may bring us to an early death, or those that are simply useless to us. Each one of these manifestations of life has been brought into our world, given a name, and associated with a series of characteristics. This knowledge, now our property, is the fruit of a long effort of appropriation, performed by dozens of generations, by which we, as a species, turned the tree of life into a storehouse of wealth for our benefit, a source from which we could not only obtain food but also a flurry of things like medicine, building materials, or ornaments. The branched pillar of life in front of our eyes is, thanks to its appropriation by our forebears, now a reserve of things of life,

ready to be picked up by our greedy hands and used to give us an edge in the great play of love and war.

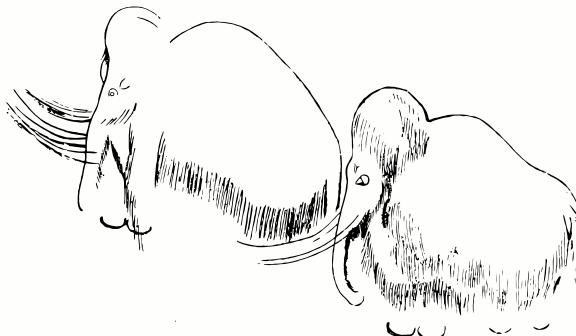
Equipped with the knowledge of our world, our birthright, we may now attempt to find something edible in the open country, something not bought with gold or silver, nor brought to us already cut into neat portions and served upon a plate. Watching mushrooms flourishing near damp trunks, we may feel bold enough to bet our lives on our knowledge of life, or more prudently, we may approach thorny bushes in search of berries or other fruits of the forests. Properly identified, we may pick one of them and observe its appearance, noting its squishy texture. What we hold between our fingers is an incredibly sophisticated vessel of nutrients, an exquisitely crafted container having received the radiance of the sun, poured into it by its mother-plant, meticulously encapsulated in the form of bonds between elements coming from the soil and the air. As we place it in our mouth and ingest it, this strength coming from our star will soon be used to feed the fire of life taking hold of our flesh, preventing our death for a little while.

Searching for things of life to bring back home as we wander under the leafy, emerald canopy, we may realize how arduous this task is in most parts of our planet. Patiently collecting what we find, we may imagine what a challenging endeavor it would be for us to live solely through such foraging. Thinking of the well-stocked pantry of our habitation, and how precious it now appears, we may notice how easily were the things in it obtained compared to the tiresome efforts we deployed to amass these meager aliments in the forest, even equipped with the extensive knowledge transmitted by our ancestors. This shows us the importance of the appropriation of life by mankind, and seeing the stark contrast between the life of a gatherer and our own, we may appreciate the remarkable progress made by our branch of the tree of life, how safe we are from starvation, even though we may on the way have lost sight of the preciousness of the fruits of nature, the gifts lavishly offered to us by the other branches of the old, crooked tree.

2.2 Hunting - Sacrificing Life

Man's appropriation of the tree of life began with the low-hanging branches, allowing their fruits to be taken just by extending his arms to reach them, without them opposing any resistance, offering themselves selflessly to us. Continuously selected through the play of love and war, favoring the curious and the resourceful over the idle and the inept, our ancestors nonetheless exhaustively brought each branch that they stumbled upon into their world, evaluating their potential usefulness. During times of plenty, when the sky bountifully watered the dry land with the crystal-clear liquid of life or when the face of the earth is continuously clothed with a cloak of lukewarm air, man satisfies his hunger with what he knows, what requires little effort. During more inclement times, when the heavens mercilessly attack the tree of life with ice, fire, or floods of water, man is nonetheless forced to explore new possibilities for his survival. Seeing the decaying carcasses of larger beasts struck down by old age or the claws of ferocious dwellers of the earth, the mainly fruit-eating creature discovered the taste of meat, kindling in its mind a new desire.

Tearing bloody chunks of raw flesh, patiently masticating them before letting them fill his belly, the scavenger has no notion of the difference between the flesh of an apple and the one of a mammoth. Life nonetheless knows, and his body recognizes the true value of the scarlet treasure. The body of the living represents both pieces of machinery and coffers filled with materials and energy, no matter whether it is a blade of grass or a saber-toothed cat. The great body of life caught between earth and sky is the product of a relentless work of edification, uninterrupted since the sprouting of the first seed of this miraculous chain reaction, with the plants weaving light, air, and earth into complex substances, miraculously encapsulating the energy of our star in the form of bonds between elements. Plant eaters further this work, concentrating such complex compounds in great quantities in their flesh, ingesting the green capsules of light and transforming them into crimson muscles, organs, and blood. When man eats such highly refined products of life, his body is more easily sated than when his meal consists of roots or berries. His body knows that this is what it needs in order to keep the fire of life going and to thrive, and it thus rewards man with sensations of pleasure, inviting him to seek more of the same.



Parkyn, An Introduction to the Study of Prehistoric Art, 77.
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Parkyn, An Introduction to the Study of Prehistoric Art, 77.
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Figure 2.1: Paleolithic engravings of mammoths, from the Fond de Gaume cave, France. (

Parkyn, An Introduction to the Study of Prehistoric Art, 77.
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Stumbling upon carcasses, fresh enough to not have been reclaimed by the earth or have grown putrid through the agency of minute forms of life, would nonetheless not occur sufficiently often to represent the main source of a man's diet. If man wants meat, he will have to cease waiting for it to effortlessly be given to him and rather kill to obtain it. He will have to end a life in order to extend his own and grow in stature, allying himself with death as a means to rise above his peers and other branches of life. Unfortunately at first, man realizes that life has not endowed him with a body well suited to hunt and kill prey. Most prey would indeed outrun him, and even if he was able to catch one sufficiently large to be worth the effort, he would seldom be able to overpower and kill it with his bare hands. He can only strangle, severing the bond between the creature and the air of the skies, thereby extinguishing the fire of life, adding its flesh to the earth and the body of death. His head is only adorned with long, soft hairs, while other creatures have been given pointy horns, able to gore him. His fingers end with fragile nails, whereas the beasts roaming the plains have long claws as sharp as a blade. Other creatures are covered with dense fur and thick skin, while his own is easily pierced by the teeth of even the feeblest dweller of the forests. Far from cursing life for the inadequacies of their bodies, our forebears nonetheless did not concede defeat to these other branches



of life, knowing that they had received gifts more precious than any weapon, more advantageous than any other body part: their versatile hands and a brain able to soak up knowledge and build a world according to their vision.

More dangerous than the sharpest blade is the hand able to create one. What life has refused to man, he will make on his own. The speed and agility that have been denied to him will be replaced by teamwork. Armed with the knowledge of his world, the heritage of his ancestors, his appropriation of the earth, in particular, he devises weapons that will allow him to overcome even the largest beasts roaming the dry land. He fashions long spears of wood with razor-sharp heads made of flint that can pierce through skin and muscle. Bows are invented, allying flexible wood with strings made of the bowels of animals and thin arrows reaching their target faster than any man could. He thus wields the strength of the earth to rise among the other branches of the tree of life, not only equaling the weapons offered by life to other creatures but even surpassing them. Most branches soon find themselves at the mercy of the new lords of the earth, who brings death wherever they set foot, causing them to be feared among the dwellers of the dry land, even among other men, if these do not share with them their mastery of the earth necessary to make and wield weapons.

A new step in the appropriation of life is then taken. The gatherer also becomes a hunter, someone who not only collects what life offers him, the fruits, seeds, or leaves that cannot resist and passively wait to be eaten, but rather actively seeks creatures that know the fear of death, the value of life, and that continuously struggle for

their own survival. To feast upon the flesh of other animals, man must enter into combat with them, proving his superiority in order to be allowed to claim their bodies as food, making the reserves of strength that they represent his possession, absorbing them inside his own flesh. Each hunt becomes a gamble, as the hunter may lose his life, his torso gored by a horn, or his blood spilled over the earth by a sharp claw. This nonetheless only stimulates the play of love and war, and it fortifies our branch of the tree of life, winnowing the skillful from the incompetent and leading to an increasingly broad appropriation of life, with all branches progressively falling under the yoke of man.

The taste of meat then becomes familiar, and the time spent stalking and hunting prey is rewarded by a considerable increase in the amount of heavenly strength absorbed by the living body of the hunters. Accumulated in plants and then flesh, the radiance of our star flows in greater quantity within their body, as they gorge themselves upon the muscles, fat, and marrow of the largest beasts of the land. This flow not only rejoices their palate, it also allows their muscles to grow and their brains to develop. The pressure exerted by the hunters upon the prey nonetheless also has a similar effect upon them, as man takes charge of weeding the flocks of their weakest individuals, thereby favoring those that are the most able to resist, by fleeing speedily, attacking ferociously, or simply not being found, even though the pace at which man appropriates life remains far greater than the one at which other branches of life are selected, quickly allowing him to reign supreme over life as a whole.

The effect of the emergence of hunting is nonetheless not limited to an improvement in nutrition. Man's relationship with life itself finds itself enriched by this new activity, as he not only learns to submit new branches of life to his reign but also finds himself frequently standing on the line separating life from death, a living being from a mere piece of meat. Seldom will a prey die from the blow of his spear, or the wounds caused by his arrows. Immobilized and at his mercy, he must extinguish its life with his own hands, feeling it slowly returning to the earth as he slashes its throat with the edge of a blade and lets its blood profusely water the soil. The execution of the animal after a long and strenuous hunt should be a mystical experience, one that offers a stark contrast with the gathering of fruits or grasses, as he can feel the despair and pain of the creature, hear it gasping for air, striving to stay alive, feeling death approaching, just as he himself would be if he had been overwhelmed by a man



or a beast. This ritual nonetheless is not the result of an instinct engraved in his flesh. It is itself the result of a learning, as the first killings forced him to learn the nature of these bodies shedding their blood on the earth, and thereby to learn about the essence of life. If the link between blood loss and death appears obvious to us, it is only because it is a piece of knowledge that is part of our world. The vision of the crimson liquid may instill fear instinctively, but man had to learn how it flows through a body, and how the severing of the largest arteries would lead to a quick death. The hunt therefore leads to a discovery of the nature of animals, learning the weakest points of their flesh, but also their behavior, their habitat, and the way they reproduce, that is, their role in the play of love and war, allowing more efficient hunting.

The appropriation of life brought on by the development of hunting thus involves more than the possession and ingestion of an earthly mass of flesh. It implies a greater intimacy and understanding of the branches of life that are preyed upon. As the hunter cuts off the skin of his prey and takes it off like a garment, the machinery of life that animated this body is now exposed, revealed to his inquiring eyes. He learns the location, the shape, and the texture of each and every part of this body as he passes the edge of his knife over them, cutting this former part of life not only into bits of food but also into things that are part of his world, each one of them now being identifiable as a distinct thing, associated with different properties, such as its taste, and bestowed a unique name. The place of the middle realm, life, therefore grows within man's world, as his knowledge of his prey is refined and passed on to new

generations. He can also observe the similarities between all the creatures of the land, seeing how his own body is not so different from the one of most land animals. Living in a world still unencumbered with morality and guilt, the first hunters probably had yet to develop strong taboos about the hunting and eating of their own species, offering them an in-depth look at the nature of their own flesh, even though the instinctual fear caused by the vision of other men being butchered would certainly have led to an avoidance of such practices.

When we seize the opportunity of exploring the open country, silently treading upon the grassy carpet of flowery meadows, calmly making our way through the curled ferns bordering woodlands, we may perchance be offered a glimpse of the wildlife, the creatures roaming free between earth and sky, far away from the yoke of man's world. There, one may behold the quiet majesty of the deer and the furious vigor of the boar. In the grass will the meekness of the rabbit be revealed, and the elegance of the duck's colorful feathery coat will shine upon the mirror-like surface of lakes. Admiring how life harmoniously grows between earth and sky, the well-fed will probably not think of such an enchanting scenery as a hunting ground, and of the wildlife as meat, containers of the strength of the daystar woven into flesh. Let us nonetheless imagine ourselves inhabiting the open country, without anyone to provide us with the sustenance we need to keep the fire of life burning within our skin. How long would it take for our vision of this idyllic landscape to be transformed by hunger or starvation? How much scruples would we then have if our existence was directly threatened, if we had to choose between their life or ours?

The creatures of the wild have nonetheless been patiently selected by life to be wary of the threatening presence of man, and thus most of them can only barely be seen at a distance, stealthily taking cover behind foliage or through the lens of a spyglass. As soon as we emit the faintest sound, allow our scent to reach their nostrils, or slightly move in their line of sight, they scuttle in the shadowy depths of the woods or run to the horizon, out of the reach of our bloody hands. The difficulty of hunting may thus begin to appear, as even if we intend to sacrifice their existence to extend ours by a few more days, laying our hands upon one of them is easier said than done. We may attempt to catch a dove or a field

mouse with our bare hands but the chances of us succeeding at this seemingly unambitious task are extremely slim. Such an experience nonetheless teaches us something precious concerning the appropriation of the middle realm by our branch of life, as we know that while we are now largely inept due to our unfamiliarity with the wild, the first men were skillful hunters, even though they only had the most rudimentary weapons and tools at their disposal. Trying to reach something distant with a stick or a stone, our helplessness will once again become manifest, even when using instruments that would have sufficed for our distant forefathers. We may therefore pay homage to the men of the remote past and those of the present who have preserved the knowledge of the first hunters, as if found stranded in the open country, they would survive, while we would certainly perish.

For the men of our present world, hunting is now often a privilege of the affluent, leisure rather than a merciless struggle for survival. More than ever, we consume the succulent flesh of animals, but it now comes to us directly as meat, cut and wrapped, sold for coins, objects of our world rather than living creatures put to death so that we may have a chance to live. Few now have experienced the almost mystical act of extinguishing the flame of life burning within a living creature to butcher it as meat, but as we slash the flesh of a whole chicken, we may nonetheless experience a sensory contact with its body, letting ourselves be instructed concerning the nature of life. Examining this corpse meticulously, we may notice the numerous parallels with our own: its tubular nature, its four limbs, its head adorned with a mouth and two globular eyes. Tearing off the limbs with our hands, we may be unnerved by the cracking noises of the ruptured cartilage and shattered bones, knowing that this could also one day happen to us. Touching the soft flesh with our fingers, seeing traces of blood, we can compare it to the muscles in our arms, acknowledging their similitude. As we complete the preparation of the carcass, let us submit ourselves to a moment of introspection, examining our feelings concerning this experience. Are we comfortable with the idea that this carcass we butcher and are about to eat was once a living creature sharing many parts of its nature with us? Considering our own body, what do we think of the idea of us being treated this way after our future departure from life, our ineluctable return to death?

Regardless of our feelings, we may remember that we can only survive by ingesting other living things, either plants, fungi, or an-

imals. The meat in front of us represents the result of an arduous effort. It is the product of the harnessing of the ardent strength of the sun, with air and earth surreptitiously turned into plants and then into flesh. Consuming this meat, let us accept the sacrifice of the living thing whence it came, and let us honor the patient toil of life, the efforts spent to produce it, as it will allow us to remain part of life for a little longer, enjoying the bliss of being, fully satiated by this invaluable present of nature.

2.3 Wearing - Insulating Life

The lion running through the savanna under the noon sun may wish it could strip away its furry coat to enjoy the feeling of the breeze caressing its skin, carrying away the sweat and the heat covering it, but getting rid of the coat freely offered to the animal by life would imply that it would suffer from the cold during the darkest hours of the night. Finely refined through the ages, this coat is thus tailored to provide the creature with the best compromise, allowing it to withstand both an overbearing presence of the daystar or its prolonged veiling, times when either fire or ice reigns upon the earth. Man's ancestors were also endowed with such a coat of dense hair, but in man's case this coat grew more and more patchy from generation to generation, as the standing creature now found a better way to withstand the dangerous whims of the heavens.

When encountering icy winds or frigid rains causing his body to shiver, threatening to extinguish the fire of his life, man may have first discovered that he could cover himself with ferns or large leaves, protecting his flesh and preserving the heat radiated by it. Seeing how fearless other creatures were as they faced snowstorms, like the woolly mammoth, covered with bushy long hair, envy certainly grew in his heart, as he saw himself so weak, so ill-equipped to face the celestial forces compared to most beasts with which he shared his land. What life has denied him, he will nonetheless once again take by himself, with the strength of his hands and the sharpness of his mind. As he hunts or scavenges, having butchered larger beasts for their delicious flesh, he finds himself playing with the furry coat discarded on the ground, perhaps jokingly pretending to be a deer or a bear by wrapping himself in their skin. He thereby feels its warmth, how it preserves the heat of his own body, preventing it from being robbed by the winds, and thus decides to bring it into his shelter, using it as a blanket when the sun has retreated beyond the horizon and cold shadows tightly enfold the earth.

As if the hunter gained some of the strength of its prey by wrapping himself in its fur, he discovered that it allowed him to boldly face the unpredictable rage of the heavens, whereas in the past his nakedness forced him to hide inside the body of the earth, seeking its protection. Worn on his shoulders, the blanket became a cape, accompanying man during his winter hunts. Dried and cleaned, trimmed of its extremities, the skin became a hide, a thing that is



now part of his world, with a value in the eyes of men, something that can be offered as a gift or taken as tribute, as it can contribute to his survival or his prestige, playing a role in the play of love and war. These hides nonetheless frequently fell down and only partially covered his naked skin. He thus probably first cut a hole for his head, allowing the hide to be worn as a poncho, giving it stability and increasing the surface covered by it. This marks the invention of the first piece of clothing, an invention still used daily by almost every single human being presently living on earth.

The appropriation of the skin and fur of animals represents an appropriation of their original usefulness, which was discovered by

life itself after an extremely long refining process. Fur arose as a means to insulate life from the earth and the sky. It represents a layer where hairs, dead earthly matter, encounter air, blending earth and sky to represent a buffer between them and a living body. Life produces such a savant blend of resistance and flexibility, earth and air, to create an armor against the assaults of the celestial forces naturally, without impeding the movements of the creature wearing it. This is why the first men needed to appropriate other branches of the tree of life in order to obtain the hides that they would transform into clothes. Man no longer merely hunts for food, but also for materials, even using the bones of the wild ox or the ivory of the mammoth's tusks to carve needles with which he would be able to sew pieces of skin and fur together, allowing the creation of pieces of clothing tailored to the shape of a body, further increasing their capacity to insulate man from the air, the rains, or sunlight.

Now able to wear clothes and take them off at will, immediately adapting himself to the whims of the heavens, man no longer needs to rely on the hairs of his body for warmth. When the sun pours down rivers of fire upon the earth during the summertime, this natural coat furthermore becomes a hindrance, causing him to sweat profusely and discomfort, and this may be one reason explaining the phasing out of the thick coat of hair of our distant ancestors, as those with a thinner one may have been more successful in love and in war.

Man can thus wield life as a tool protecting his body, appropriating the hard skin of the buffalo, the fluffy wool of the mammoth, or the thin fur of the deer. He explores the possibilities their offer, and progressively grows more independent, severed from the earth and the sky. The leather shoes enveloping his feet cut off the last bond between the standing creature and the bare soil, shielding his skin from the dampness of the ground and from being abraded by the sands or slashed by pointy rocks. Thin gloves allow him to manipulate ice and snow without seeing his fingers blackened by frostbites, while a broad hat prevents sunlight from burning the skin of his neck as he travels through the treeless plains under a blinding sun. The thick hides of the living nonetheless not merely protect man from the assaults of the celestial and terrestrial forces, it also offers some protection against the weapons of other branches of life, such as teeth, claws, or thorns.

The severance of man from the earth, life, and the sky induced by the wearing of clothes allows him to save his strengths. Enclosed

within an envelope of fur or leather, he is protected, like the content of a vault. He himself is a wealth of life that is to be preserved, from the unceasing attacks of the earth, other parts of life, and the skies. Insulated from the rest of nature, man nonetheless finds himself increasingly isolated. The gloves on his hands prevent him from feeling the texture of the earth. The shoes on his feet render him insensitive to the peculiarities of the ground under his feet, and the hat covering his head renders him oblivious to the blowing of the winds, breath of the heavens. Clothing becomes a rampart standing between man's world and the truth of the earth, life, and the skies, defending him from the dangers lying beyond this wall but also rendering him blind to the beauty of nature, cutting off his senses from various experiences.

Man's appropriation of life to make pieces of clothing nonetheless continued, evolving across the ages. A variety of garments emerged, with each one of them adapted to fit a part of the body, a season of the year, or a part of the earth. The crudely cut hide covering the cave dweller slowly gave way to tanned leather and intricate sewing works. At a later point, he discovered that animals were not the only branch from which clothes could be made, as he discovered that plant fibers such as hemp or linen could be interleaved to form long threads, and that in turn these threads could be woven into cloth, easier to cut to form garments and more flexible and soft than the hide of large beasts. Ultimately, man would even discover that the sooty liquid formed by the decayed remnants of ancient forms of life, oil, now part of the earth, could be likewise used to create clothes, freeing us from the need to extinguish life to protect ours.

Using his wit to acquire what life has refused to give him, man nonetheless only seldom equals the work of life itself, the fruit of a patient selection. Man's skin is not intended to be covered all day long. Sweat is meant to be swiftly carried by the winds, joining the clouds, but when he wears a thick garment of leather on his bare skin, it remains captive of this envelope of life, accumulated and keeping the skin moist until this supplementary layer is taken off. This provides a fertile ground for the growth of minute forms of life, which begin to take root in the skin, worsening man's health. He must therefore learn remedies to these woes, frequently washing his clothes and his skin, or otherwise see his body conquered by infections, reminding him of the artificial nature of his appropriation of the bodily envelope of other creatures, which do not render him equal to them.



The impact of the emergence of clothes would nonetheless soon cease to be limited to the protection of man's flesh from the earth and the sky. Once such objects entered his world, they would soon occupy an increasingly greater place in it. One of the most universal and important roles later assumed by pieces of clothing is to conceal the reproductive organs. Ceasing to be beasts and becoming rational animals, men began to see the need of controlling the lust possessing them, the primal desire that guides the growth and perpetuation of life, as uncontrolled expressions of love ineluctably led to unrestrained acts of war, detrimental to the survival of the groups they now formed. The taboo of incest emerged, and consent started to be expected before a union of bodies, separating men and women into different categories within their world, such as those with whom one could make love and those with whom it would be impossible. Following this evolution of man's world, clothes began to be used in a different way, not to insulate but rather to conceal the body from the eyes of other men and women. The genitals began to be hidden with leather or cloth, so as not to kindle the lust of others, the attention of persons with which one does not intend to merge his body and produce an offspring. Clothes would later also become pure symbols of prestige or authority, expressions of beauty, or mere statements of belonging to a community. They thereby play an increasingly important role in man's world, being valued not only for the protection they offer to the body but also for what they say of the person wearing them. Used to impress, like the display of colorful feathers used by birds to seduce their mate, clothes slowly become costumes for the participants in the play of love and war, a way to send a message to the dwellers of the world to convince them

that one is worthy of being loved or should be feared in war.

Thrown at birth onto the naked earth, immersed into a vast reserve of air continuously stirred up by the winds, under the gaze of the blazing eye scrutinizing land and seas from the highest heavens, our life always remains in the gargantuan hands of the forces of nature. The celestial wheels incessantly rotate, taking the dwellers of the earth in their invisible whirlwind, as the years pass, following the seasons and the days, with each one of them offering us a unique display in the sky, and a singular combination of light, air, and water entering into contact with our skin, demanding that we promptly react to the whims of the realm above, one day plunging us in the flow of frigid, torrential rains and enshrouding us in fire the next. When we cannot withstand the exhausting trials of the skies, we retreat into the body of the earth, within high walls of stone, secured by the stability of the lower realms, contrasting with the fickleness of the firmament. Stepping out of the threshold of our home, we may nonetheless notice that we have at our disposal things helping us stand up to the unforgiving forces of nature. The garments lain upon our shoulders represent pieces of armor made either with life or earth, leather or plastic, sheltering us from the winds, blocking the envoys of the most ardent star, and letting the rains fall down to the earth without stealing our warmth on their way to the depths of the lower realm. Touching these things, our property, we may reflect on their nature, their origin. Was the material they were made of once part of life, the skin or fur of a living creature, or the product of oil, the liquefied remains of ancient forests and their inhabitants, reclaimed by the earth eons ago? To whom do we owe this intricate piece of armor separating us from the rest of nature?

Retreating to a secluded part of the open country, we may now take off our garments one by one, feeling the steady increase of the flow of sensations carried by the web of nerves pervading our skin. With each layer taken off, our flesh is tingled more and more by the winds, as each hair of our body dances with the celestial currents, triggering a cascade in our senses. Depending on our location on the earth or the season, we may either be overwhelmed by pleasure, if these clothes were a burden to be worn while engulfed in torrid air, or we may see our flesh seized by uncontrollable tremors, if the air is seldom exposed to the fire from above and the land covered in ice. Observing the amount of clothing we carried here, we are

offered a representation of the hospitality of this parcel of nature, a quantification of how much our presence is welcomed and how much effort it takes to survive the whims of the skies in this land. Now, we can realize the role played by the appropriation of life by our fathers in our ability to inhabit this part of the earth. Without these garments, would we be able to survive constant exposure to the gusts of wind sweeping this land, either torrid or frigid, for even a single day?

Observing our nakedness as we stand awkwardly in the open air, we may feel particularly vulnerable. Without our undergarments, the most intimate parts of our body are exposed to the prying eyes of strangers. The portal to our most primal pleasure, the simplest ecstasy, and the channel through which we can kindle the spark of a new life is offered to all to see, something that may be interpreted as an invitation given to all passers-by. This goes against our nature, as there needs to be war in order for love to arise. There needs to be selection before there can be reproduction, as the play of love and war is the way whereby life evolves and progresses, weeding out the inadequate and exalting the fittest. Thus do men, and women more particularly, as those mainly in charge of selection, cover the center-part of their body, the end of the tube that every animal forms. We may now consider how such conventions vary according to the part of the world we inhabit, the era in which we live, or simply our education. These undergarments are products of our world rather than tools protecting us from the unpredictable and unforgiving whims of the sky. But even the outer layers of our clothes possess a worldly dimension. They are more than mere pieces of cloth insulating us from the air, the rain, or sunlight. Their shape, their color, or the nature of their fabric also represent statements made by the person wearing them. They are signs bearing a meaning in our world, associating someone with different groups, different opinions, or different tastes. Examining our clothes as we put them back upon our shoulders and around our waist, we may reflect on what they say about us. What does our choice of wardrobe tell about ourselves? This conspicuous overlay of meaning on our clothes may even sometimes replace their original purpose, if we wear them solely for their appearance, for the message they convey to others, rather than as a means to supplement the deficient parts of our bodies, being clad with the skin of another creature. If it is by pure vanity, let us wonder if we are then worthy of the sacrifice made by these creatures, by life itself, as this piece of clothing represents

innumerable hours of labor by the humblest forms of life, which patiently wove air and light into this skin, this fur, these fibers.

2.4 Cooking - Preparing Life

The sky is a gigantic storehouse of air from which man can draw his breath, without restraint, without effort, and without needing to give something in return. The heavens also lavishly pour out water over large parts of the dry land, creating rivers and brooks from which he can quench his thirst. The third primal need of his body, the hunger that seizes his flesh every day, nonetheless demands far more effort to be satisfied. He persistently strives to gather, catch, or hunt for his daily meals. Life is not as selfless and generous as the earth and the skies, but this necessity to struggle to secure food is a major factor allowing life to grow in resilience and sophistication. Food, parts of the great body of life caught between earth and sky, represents a wealth of power, containers of strength that can be used to animate our bodies, and prolong our existence. This wealth and this power can be wielded like a tool made of earth, used to gain an advantage over other individuals living things or other branches of life. It can be appropriated to fortify one's flesh, to improve the body, leading the most skillful to win wars and love, ultimately being more likely to have a greater number of descendants.

Obtaining food is nonetheless not the only way man can appropriate the great body of life. Without a doubt by accident, some of our ancestors left food close to the flames of the hearth as they gathered around it to eat. They may also simply have wanted to thaw a chunk of frozen meat previously stored in snow. Whatever the reason, lost in the depths of the past, they fortuitously discovered that contact with the heat of the hearth profoundly changed the appearance, the texture, and the taste of their food. Charred by the proximity of glowing embers, a piece of meat acquired a distinct flavor, filling the air with an appetizing fragrance and smoke. Sinking his teeth into this partially burnt flesh, it appeared far easier to tear apart and chew than when it was raw. Warm blood and juice profusely flowed out of the meat, as he let the masticated flesh pass through his throat and enter his belly, with an intense feeling of contentment. As the practice of cooking meat in the hearth became a habit, man found that it not only enhanced the flavor of his food, it also significantly facilitated its digestion. Cooking thus began to become a way for him to appropriate life in a different way, transforming his food before it enters his belly, not only for pleasure but also because it allowed him to save some of the strengths his body uses to break down raw meat and extract the minute building blocks



of life and the energy concealed in it.

Unknowingly at first, man wields fire as a tool to untie the bonds woven by life itself, as it transformed light, air, and earth into plants, and then these plants into skin, flesh, and bones. The complex, large substances forming tight bundles of muscles and nerves are slowly dismantled by the blaze. The force of the sun imprisoned within the wood thrown into the hearth is unleashed upon another part of life, the fresh meat, and this torrent of light and heat creates a violent commotion among the most minute parts of this piece of food, tearing apart the chains of elements that make it a solid block of living tissue. Uncontrollably vibrating, some of the scaffolding of this living structure crumbles, softening it considerably, causing slight pressure to make it fall apart. The very fabric of a living thing is thus unraveled by the power of fire, as man uses burning wood, former life reclaimed by the earth, to break down the flesh of his freshly killed prey. Such breaking down would have been performed by his digestive organs, using corrosive substances and pieces of chemical machinery of the body, but now man has learned to externalize part of this digestion, using the energy encapsulated inside wood so that he would not have to use his own strengths, allowing what is saved to be used for other purposes. Cooking therefore becomes a means of appropriation of life, not in the sense of an act of possession, but rather as a way to make parts of life something that will soon become part of his body, preparing them with fire to make their welcoming within his own flesh easier, to adapt life to his needs without it costing him precious resources.

Unbeknownst to the first men who discovered cooking, the force

of the flames is also useful as a means of defense against other forms of life, invisible creatures creeping inside man's flesh to feed upon his strengths, treating his body as a conquered territory from which they can extract their food. Invisible to his eyes, minutes eggs or larvae indeed infest the flesh of the beasts of the dry land, passed on to the man eating it raw. The commotion induced by the fire nonetheless kills these unwanted stowaways, rendering them inoffensive as they pass through his body. Fire thus becomes a weapon used by man to combat other branches threatening him. It purifies the food that is about to enter his belly, ensuring that no living thing could find a way inside the body through his mouth, using food as a Trojan horse to attack him. Those who persevere in eating raw meat therefore find themselves less healthy than those who cook theirs, as they are weighed down by these creatures steadily stealing their strengths, making them less skillful actors in the play of love and war, and thus leading them to progressively be replaced.

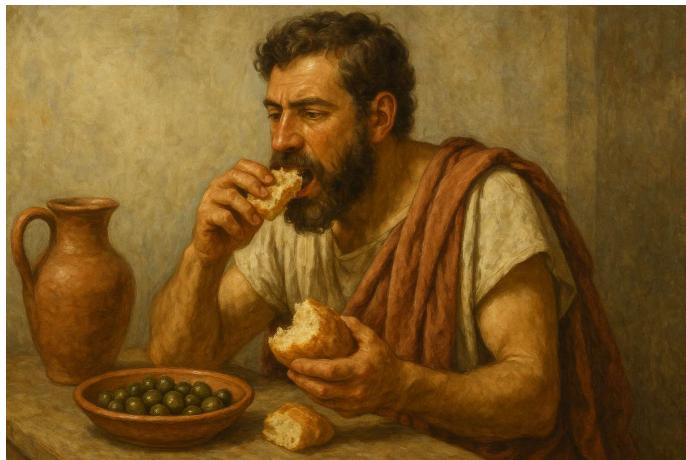
Man then learns the art of cooking, experimenting with different techniques to unravel the fabric of life. He also expands the range of what he cooks, seeing how the transformation operated by fire not only concerns meat, but all kinds of food, such as fruits, tubers, roots, leaves, nuts, or grain. Developed across long periods of time, following the advances in man's appropriation of the earth, in particular, he uses both the earth and the sky as recipients of the fire's flow of heat, imparting them with a force that can untie the mesh of life in different ways. Using the air of the heavens, made scorching by the fire, all sorts of food can be roasted directly over the flames, pierced through and through with a branch of wood, and frequently rotated to even out the heat. At a later point, the flames would be used to heat ovens, enclosures in which hot air is trapped, slowly and gently cooking what is placed inside it. Man would even learn to combine the use of water, air, and fire to steam food, preventing burning and drying. The earth is used as well, with food buried in the soil underneath embers, their heat being slowly imparted to it, while man can go away, letting the earth cook his meal. Once man mastered the fabrication of earthenware, he discovered boiling, placing ceramic pots filled with water over the flames. Wielding the dissolving nature of water and combining it with fire allowed a considerable expansion of recipes to be created, mixing various ingredients and letting their taste patiently be merged to create new flavors, allying meats with vegetables and herbs to create stews and soups, liquid food. Completing the use of water, the mastering of

blacksmithing led to the appearance of pots and pans that could be used to sear, sizzle, or fry, parching pieces of life using an alliance of earth and fire.

The delicious marriages of flavors created in cauldrons are a delight to man's palate, but this pleasure may only be a sign given by life itself of the fact that cooking food is simply better for his health. Indeed, even when his body devotes a considerable amount of energy to breaking down what is eaten into basic substances that can be used to build up the body and keep the fire of life burning inside it, many complex substances are simply too resistant and are thus abandoned, left to leave the body. Cooking allows a further breaking down, and thus a more complete absorption of the wealth found inside the ingested food, and this, in turn, leads to a strengthening of man. Cooking represents an appropriation of food, but also an appropriation of the strength encapsulated inside it, allowing the one eating it to see himself transformed, growing in stature and intelligence, as the machinery of his body suddenly finds itself flooded with nutrients, a body that soon discovers how to use this newfound wealth.

Once again, the extension of man's appropriation of a realm also ineluctably leads to an alienation from its truth. The more complex the cooking, the more refined the cuisine, the more distance there is between life and the meal that is eaten. Boorishly tearing away a chunk of meat from the carcass of a fresh kill and chewing the blood-soaked flesh raw, man faces the earthly essence of life. He is in direct contact with the body of what was a part of life, easily recognizing to which branch it belonged, and which part of the body he is consuming. Using a wooden spoon to drink a patiently simmered stew or a soup, on the other hand, he cannot easily identify all the ingredients that he is eating. What he tastes is not a determined part of life, but rather a creation of man's world, following a recipe, fruit of the mind of someone else. The nutritious and tasty liquid represents a complex and indistinct blend of substances, hardly recognizable as remnants of living things. The advent of cooking leads to a severance, the emergence of a gap between man and the rest of life, as many do not themselves prepare their meals and have no occasion to see what they are made of. To them, it may seem that they eat the products of their world rather than the fruits of life, having no contact with the raw ingredients.

Concealing certain aspects of life from a part of mankind, the



advent of cooking also caused an expansion of man's world. An incredible variety of cookware, utensils, tools, and appliances slowly emerged, made from all the substances of the earth. Parts of life that had been ignored or dismissed as useless now finally entered his world, such as spices and certain herbs, which are not eaten raw or alone but may enhance the flavor of a meal when cooked, inviting his kind to continue to explore the earth and examine the remarkable variety of the branches of the tree of life growing in their land, therefore leading to an increased appropriation of life as a source of food. Finally, this new practice soon becomes an art in itself, associated with knowledge passed on from generation to generation. It became a topic of conversation, something learned and taught, with a plethora of words created to describe each manner in which one can cook something, each ingredient, each recipe. Furthermore, this growth of the importance of cooking in man's world also caused the appearance of an increasingly greater rift between peoples dwelling in different parts of the earth, and thus different worlds. They each develop their own cuisine, first due to the peculiarities of the living things found in their land, but then also due to the divergence of the products of their mind, the different recipes created by their people, the different habits developed from parents to children, which result in a complexification of man's world.

Consumption of food is one of our most fundamental needs, like breathing air and drinking water. Every single day of our lives, most of us take time to indulge in the satisfaction of this primal need, inserting food into our mouth and letting it enter our stomach

after a brief moment of mastication. Parts of our meals may be directly composed of the raw fruits of life, received as they were produced by it, without the hand of man having played a part in their appearance, their texture, or their taste, such as an apple or a handful of hazelnuts. We may occasionally enjoy a filet of raw salmon or a fresh tomato, but most men nonetheless favor cooked meals. The preparation of food not only occupies a part of our day, it also occupies an important place in our homes, no matter in which corner of the planet we were born. The kitchen is a chapel devoted to the transformation of food, especially through the use of fire, heat. It is a space that, for a long time, remained the dominion of women, serving as the high priestesses performing their daily liturgies, sharing with their family their culinary artworks, giving pleasure of the senses of their loved ones while ensuring the continuation of their being. We may observe the location of our kitchen within our home, and how it is arranged, what it contains, and thereby be reminded of the function of each appliance, each utensil, each surface, considering the role they play in the transformation of raw ingredients, fruits of life, into the meals we eat at our table, the role they play in our appropriation of life.

It is no coincidence if we still eat raw fruits, without seeing the need to cook them. Our bodies indeed evolved to feed on them, as our distant ancestors dwelt in trees forming the wooden pillars of luxuriant forests, while the consumption of meat, grain, or tubers only came later, when our bodies strove to catch up to the changes in our fathers' diet. Through the use of cooking, we help our own bodies absorb the wealth of substances found in our food, breaking it down into basic building blocks of life and extracting the energy concealed inside it. To experience the benefit of this practice, we may attempt to eat an uncooked carrot or an onion. This demands a considerable effort of mastication, as both are relatively hard, and need to be turned into a paste in our mouth before they can be swallowed. The acidic nature of the onion may cause the shedding of a few tears, and as we would wipe them off our cheeks, our mouth would burn, and our stomach would show clear signs of discomfort. Boiling the same ingredients in water until they become soft, ready to fall apart, we may then once again eat these nutritious products of life. The contrast between what is raw and what is cooked should now be experienced, directly, with our senses. The incredible power of flames and embers should then shine in all its glory, as we see how effortlessly this food can now be chewed, how smoothly it is

swallowed, and how sweet has its taste become following its long encounter with fire, which loosened the threads keeping its together, unraveling its rigid frame to give way to a soft mass, melting on our tongue. We wielded mighty flames so that they would serve us, saving our strengths, and help us extract more from this former part of life, and we thereby honor the sacrifice of the living thing that were brought back to death to sustain our existence, by making a thorough use of its gift, not wasting the smallest part of this treasure.

Furthermore, we should contemplate the preciousness of the sum of knowledge involved as we cook. Let us observe the earthly cookware in which we place ingredients, and let us examine the appliances serving as remarkably efficient substitutes to the hearth used by men of yore, thinking about the way they work, and the source of energy animating them. We may also reflect on how we learned this art, and on who created these delicious dishes giving us pleasure as they replenish our strengths. Gathering the ingredients necessary to prepare one of our favorite dishes, trying to obtain them in their most natural, unprocessed form, we may then experience cooking as a spiritual practice, a precious moment of appropriation of life, with our mind as well as with our senses. Cutting them with a knife, forged with the substance of the core of the earth, we may feel the scaffolding of these living things patiently broken down with the force of our hands. Put together one by one, we may consider these components of our tasty artwork, the nature of their flavor, the uniqueness of their texture, and how these peculiarities will be transformed by the flame. Attentively observing the uncooked preparation, this blend of different living things, we may notice how unnatural it now appears, as something that is the product of our hands and our world rather than fruits of the tree of life. Now, we have already transformed life into world, made a part of life our possession, a thing of our world. Kindling our fire, letting this dish pass the trial of the flames, we may behold its further transformation, and see how its constituent elements become even less recognizable as former parts of life. The last step, once this preparation has been cooked, is to taste what we hope is a succulent meal, this man-made wonder blending life and world. We are then offered a precious opportunity to fully appreciate the mark of the embers upon the taste of these ingredients, these parts of life. Each day, such activity should be performed as a holy ritual, with our hearts filled with boundless gratitude to our ancient bloodline for this marvelous gift, standing in awe of the richness of the fruits of life, thankful to be able to appropriate them to prolong

our life, even if it is only for a few more days.

2.5 Domesticating - Taming Life

Before man built cities of stone and sealed his world off from the open country, he lived in close contact with the earth, life, and the skies. He dwelt in caves or tents, with a fire pit at its entrance, with part of his living space remaining in the open air. Allured by the fragrance of the meat caressed by the flames, as it is carried by the winds all around the land to reach the nostrils of its inhabitants, wild creatures regularly approach this strange altar where life is being burned like an incense, producing fragrant smoke kindling the appetite of the beasts of the land. Spending their days stalking prey, often with meager results, the ravenous creatures, desperate for food, behold the success of the standing ones, who wield fire, wood, and stone to subjugate all other branches of life, enjoying an abundance of meat in their camp, the soil littered with the bones of their victims, a testimony to their superior hunting skills. Undeterred by this, creatures large and small use the darkness of the night as a cover to attempt to snatch away some of their wealth, taken from life itself.

The wolf becomes a frequent visitor of the camp, and while its inhabitants are careful with the beast, knowing its ferocity and the dangerous nature of its dentition, they progressively get used to these often-inopportune visits, occasionally throwing some bones away to appease its hunger and its rage, recognizing in it a part of their own nature. A familiarity slowly grows between the visitor and the host, as both come to know that they have nothing to fear from each other. Man offers food to the wolf, whereas he enjoys the company of the beast, seldom having the occasion to approach other branches of life without them fleeing in fear of his arrows, his spears, or his traps.

Growing more and more accustomed to each other, the behavior of both living things begins to change as a result of their encounter. Fed by the hand of man, the wolf now sees the mysterious standing ones as protectors rather than predators. It not only lets itself be approached by them, but also actively seeks contact, sniffing their skin, while letting them pass their hands in its long fur. Man is still prudent, knowing the beast to be unpredictable and still dangerous, but he grows fond of this strange presence, so different from the one of the other members of his kind. The wolf progressively ceases to rely upon its own hunting skills to feed itself and instead relies on the generosity of man, and doing so, it submits itself totally to



the one slowly becoming its master, exerting an authority on it, one that somewhat resembles the one of the pack leader of its branch of the tree of life, perhaps explaining why this particular branch was the first to be appropriated in this way by man. A decisive step was taken when the creature abandoned its natural habitat, the vast expanses of the open country, and remained by the side of its master, in his camp, becoming part of his household, that is, *domesticated*.

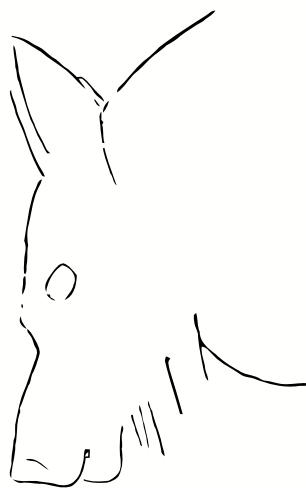
The wolf's nature is profoundly changed by its submission and its cohabitation with man. Tamed from birth, its place in his world changes. It is offered a new identity as its nature increasingly differs from the one of its brethren found in the wild. The wolf slowly becomes a dog, a friend of our kind rather than a predator or a prey, and this initially improbable friendship between these two branches of the tree of life, which began at the dawn of our history, perdures to this day. Submitting itself to man, the dog nonetheless not only receives its sustenance in return for the pleasure of its company. Our species indeed soon discovered that this creature could be used in the same manner as he used a tool. Man can appropriate the strengths and the skills of the dog, making the creature an extension of his own body, like a spear or a knife, but one that shares with him its nature as a living being. This marks a turn in his appropriation of life. Before this point, the middle realm indeed was only appropriated through a passage from life to death, using the flesh of living things as meat after they have been killed and butchered, or their skin and fur as clothes once they have been robbed from their corpse. Here, he does not end the life of what is appropriated, but he on the contrary protects it, feeding the animal and giving it shelter from the coldest

nights of the winter. He finally realizes that the wielding of life may give him more power than the mastery of death. The living are no longer mere vaults of strength, food to be ingested to prolong one's existence, they can assist man in his daily tasks, serve him, and be his allies in his struggle for love and war.

Man then began to explore the possibilities offered by the taming of wild creatures, seeing that each different branch of life possessed unique qualities that he lacked, or simply were more able than him to perform certain tasks. If an animal can be tamed and controlled, his power channeled, its uniqueness may then be appropriated and serve mankind. The dog runs faster than him, and its sense of smell is considerably more sensitive than his own, rendering him an almost ideal hunting weapon. All that is needed is to create an interface between man and beast, like the handle of a tool allowing it to be seized and manipulated. This interface is created through training, involving the senses, with rewards or punishments used to teach the meaning of specific commands, acting like switches on machines, allowing man to use the creature to perform particular tasks. The superior hunting skills of the dog can then become man's prized possession, used as he pleases, helping him to secure more food with less effort on his part, only demanding that he takes care of his subservient animal.

Having made the dog his ally in his daily struggle against the earth, the other branches of life, and the skies; using its senses as extensions of his own, its sharp teeth and powerful jaw as a weapon, its acute hearing as a way to watch for intruders in his home, man then begins to believe that he may appropriate the entirety of life in the same manner. He sees the majesty of the birds flying high above the hills and covets their wings, their incomparable appropriation of the air of the skies. He contemplates the agility of the big cats majestically jumping over wide crevasses, their ferocity as they stalk and catch some of the largest beasts of his land, and wishes he could possess their remarkable skills. Beholding the strength of the wild ox, how its mass of muscles surpasses the strongest members of his species, he imagines how effortlessly it could carry the burdens that break his own back. His appetite for appropriation is kindled by the contemplation of the diversity of life found around him, and he therefore endeavors to tame these creatures of the earth and the sky.

Contrary to the wolf, most beasts nonetheless do not get close to man, as they expect nothing from him but death. He therefore



Parkyn, An Introduction to the Study of Prehistoric Art, 76.
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Parkyn, An Introduction to the Study of Prehistoric Art, 76.
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Figure 2.2: Paleolithic engraving of a wolf, from the Combarelles cave, France.
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Parkyn, An Introduction to the Study of Prehistoric Art, 76.
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captures some of them, using traps, binding them with ropes, or leading them into secluded places, and then attempts to tame them. Some are found to be resistant to such taming, or poor learners of commands. Few can compare to the dog, exhibiting both intelligence, loyalty, and agility, but man finds out that some of them can nonetheless be incredibly useful to him. He envies the strength and the endurance of the wild horses that he watches galloping through the plains, seeing them traveling through the land at a pace considerably faster than him. The exact method by which they were tamed remains lost in oblivion, but we know it succeeded. Man learned to mount these majestic beasts, using their bodies as a vehicle, wielding the strength of their legs as a tool carrying him around the land, almost without effort on his part, using another one when he has exhausted the strengths of the animals after a day of riding. He nevertheless also found out that the horse does not possess the loyalty of the dog, and that it must be bound with ropes or locked in an enclosure, otherwise it would soon escape and return to the wild.

Life thus comes to be seen as a reserve of skills rather than a mere stock of food. A truce began among certain branches of the tree of life that previously were constantly at war, fighting for their survival, and they began to grow together, braided, sharing the same world. Men and dogs learned that they would be stronger as allies than as enemies. Man realized that the horse may be more useful as a mount than as meat, while the beast was offered safety and a regular supply of food in exchange for its effort and submission. He learned that the cat could become a weapon against other branches of life that threaten his health or his possessions, such as rodents. Much later, he would even train pigeons to carry messages through the sky, escaping the pull of the earth and thus avoiding the obstacles rendering travel on earth cumbersome and slow, appropriating the heavens by commanding a flock of birds, escaping some of his earthly nature by allying himself with the winged lords of the sky.

Man thus weaves a series of bonds with various branches of the tree of life, becoming their master and them his servants. These branches slowly occupy a larger place in his world, and their contribution to it changes their status in the eyes of men. The creatures whose skills or force are appropriated by our kind become the objects of taboos. They become respected members of his world, and they are treated differently than the rest of life, the myriad of creatures flying through the sky, roaming the earth, or swimming in the seas.



In many parts of the world, the eating of a dog would not only be considered distasteful, but it would also be seen as a rejection of civilization, an attack on man's world and its core values, a betrayal of the friendship bond woven since time immemorial between man and his faithful helper.

This world is nonetheless also transformed by man's appropriation of animals themselves. The earth appears smaller, as he can ride to remote settlements in a few days instead of a month, increasing the exchanges between tribes and peoples and favoring the sharing of knowledge and practices. It also becomes safer, and man can enjoy better sleep as he knows that guard dogs are watching over his home, and that the acuteness of their hearing allied with the loudness of their barking would allow the members of the household to be alerted immediately of the presence of danger. Bestowed names and offered a specific space within the home, man's dogs become part of his family. Their birth is cause for celebration, and they are grieved with heavy tears and mourned when they depart from life to be reclaimed by the earth. Growing attached to them, he sees in them more than servants, and some would be willing to sacrifice their own lives to save them, showing that contrary to the other things appropriated by man, either belonging to the earth, life, or the sky, the domesticated wild creatures are no longer mere tools, but rather a part from him, which causes pain when it is removed or vanishes.

Standing upon the rocky soil, under the azure canopy enfolding

our world, we are surrounded by life, myriads of creatures belonging to various boughs of this wondrous tree, each one of them going its own way but all descending from the same seed, a single living thing that emerged from death, eons ago, when a piece of inert earth aimlessly floating in water was suddenly possessed by a mysterious fire, leading it to form slightly different copies of itself. Some of the creatures around us are mere visitors of our wretched world, like the birds whose songs awaken us but that then fly away, never to be seen again, without us having the time to bestow them a name. Observing around us, we may see some of these anonymous creatures, without identity in our world, other than as a species. The ants laboring together to forage for their nourishment, or the bees searching for flowers whose essence will be turned into delicious honey, all belong to the wild, to the open country, representing a mere background of our world, leaving men largely indifferent. We may try to approach them, to enter into contact with these parts of life, extending our hand toward them in a gesture of amity. But those that are able to do so will likely nonetheless recoil and flee from our hand, perceiving us as a threat, a sign that even though we share the same part of the earth, they do not belong to us. They do not submit to our authority, and do not seek our friendship. Considering this behavior as we watch their reaction, we should appreciate the nature of the wild, which can be found even within our home.

The animals surrounding us in our daily lives nonetheless do not all belong to the wild. Many are our pets, our companions, creatures that have been given a special place in our hearts and our world. Walking in a park, we can frequently see our canine friends enjoying their daily moments of contact with the earth, where their primal nature suddenly resurfaces and they, for a brief instant, forget their condition, as dwellers of man's world, subjected to his yoke. Observing these creatures carefully, we may notice the exceptional variety of their stature, appearance, and behavior. All these animals, many of which are now so feeble and meek, are nonetheless all the descendants of ravenous wolves that roamed the vast plains and the valleys of the open country, instilling fear in the heart of men of ancient eras with their terrifying howling during the darkest hours of the night. In contact with mankind, their nature was transformed, generation after generation. Some of them appear hardly any different than wolves in their appearance, but their character nonetheless exhibits significant differences. The dog constantly looks at its master for approval as it frolics in the grass. One call of man's voice, and the

creature knows it must come back to his side, following him closely, subservient to his every whim. Observing the behavior of these pets, we can easily notice the nature of their relationship with mankind, one that lasted longer than the length of our documented history. This is the result of our appropriation of this particular branch of life, offering a stark contrast with the wild beasts found outside of the boundaries of our cities. We may then wonder if we truly deserve such faithful servants and amiable companions as these dogs, whose nature we irreversibly shaped to fit our often selfish desires as well as our needs.

We invite wild creatures inside the confines of our homes, and we patiently weave bonds with them, bestowing them names and thus seeing them in their individuality rather than as interchangeable members of their kind. They thereby become closer to us, to our crooked branch of life, and thus we cease to see them as food and would feel a revulsion at the sight of them being hurt, whereas we would remain insensitive to the sufferings of countless other branches of life, no less deserving than them. Even among the animals whose existence was appropriated by mankind, many are still treated with contempt. The ox whose herculean strength is harnessed to pull a cart filled with the fruits of the earth rarely is granted a name and no one will cry over its corpse or give it a grave, even after a lifetime in the service of man. The cow whose milk is stolen to be drunk by our children while hers are served as meat also dutifully serve mankind, without our consideration, and without our friendship. Beholding these animals, let us meditate on the relative arbitrariness of the lines we trace within our world, separating our food from our pets, our tools from our companions, wondering if these distinctions should be preserved.

2.6 Herding - Enclosing Life

Arduous it is for man to find enough prey in the open country to feed himself and his family. Performing long vigils inside the forests or on the shores of lakes at the break of dawn, he must understand the life of the creatures whose flesh he craves, and become familiar with them, before taking their lives. The wild animals nonetheless know the game played by man, either instinctively or through experience, and they therefore do their best to never cross his path, never be seen by him, so that they may live and thrive upon the earth. Man's existence nonetheless depends on this game of hide and seek, and it is not rare for him to spend days without a catch, causing him and his loved ones to suffer from hunger, or even starve. His being depends on the benevolence of the land, the abundance of life, and on the aptitudes of his body. His control over his destiny is rather limited, and he is forced to put his fate into the hands of nature. The unpredictable whims of the earth and the sky, the violent tempests breaking branches of the tree of life, often cause great variations in the population of prey on which he relies. Unceasingly struggling against the earth, other parts of life, and the sky, man is nonetheless determined to liberate himself from the yoke of fate, the whims of nature, desperately wanting to oversee his own destiny. Fortunately, his intelligence is a formidable tool, an extremely potent weapon with which he may gain more freedom from nature itself.

Our ancestors at this point realize that the appropriation of the life of the prey may give him greater rewards than a mere appropriation of its flesh. Killing the prey offers him an immediate wealth of meat, but the work of the skies causes it to quickly grow putrid, and man is therefore condemned to experience times when food is overabundant and wasted with periods of hunger or starvation of the weakest members of his tribe. Reserves cannot be made, and as soon as the fatal blow hits the creatures, their body slowly decays before becoming inedible. Searching for a solution, he decides to spare some creatures, only lightly wounded by his arrows or caught in a trap. Keeping the animal alive, its flesh remains pristine, unspoiled, ready to be eaten in the future, when the prey will vanish from the forest and hunger will strike his family. All that he needs is to restrain its freedom, prevent it from leaving his sight, and it can become a living reserve of food, one that can potentially be preserved for years.



Completing the domestication of living creatures of the wild for their strength and their skills, such as the one of the wolf or the wild horse, man thus begins to appropriate some branches of the tree of life for their meat or other parts of their body, as live-stock, living reserves of resources belonging to the middle realm. Sheep and goats are captured and kept close to his camp, parked in pens or bound with ropes. Contrary to the domesticated companions, they will not be bestowed names and man will not consider them part of his household. They are a living pantry, an insurance against the whims of the sky, a rampart of flesh standing between them and starvation. With man treating these beasts as reserves of meat or other products of their body, such as their wool or their milk, they thus have no occasion to develop a loyalty toward him, as it was the case with the wolves that became his dogs. They must at all times be watched, be prevented from fleeing back to the wild, out of his reach. Their world must now be controlled by the hands of their master if he is to keep his authority over them. The appropriation of their life thus implies a severe reduction of their world. They can no longer roam freely in the open plains but are rather enclosed within certain areas by man or his animal servants. The creatures nonetheless need to be fed, eating the grasses sprouting out of the earth, and since they can quickly clear a patch of land of all its grass, they must be allowed to roam the grassland, being frequently given a new patch.

Man therefore traces the boundaries of the world of his herd, preventing its members from crossing them with the staff held in his hand or with the deafening barking of dogs trained to be shepherds. They are branded as a sign of their enslavement by man, display-

ing their nature as property. Living within this enclosed space, this small world, they nonetheless enjoy the benefit of man's protection, paid by their freedom. They are now defended from the attacks of the ravening wolves of the open country, wild cousins of the shepherd dogs who refused subjection to the standing creature, contrary to them. Their master ensures that they have a steady supply of food and that the rage of the heavens would not hurt them, giving them shelter during snowstorms. As with all forms of possessions, man nonetheless slowly becomes possessed by his property. His herd represents his wealth, his future, his work, and thus does he care for them, laboring to preserve their lives and ensure their wellness. He can no longer depart from them for a long period, to explore new lands and discover unknown parts of the earth on horseback, as he must tend to the needs of his flock, bound to them as they are bound to him. Depending on them for his sustenance, his own fate is tied to the one of these meek creatures. He gains independence from the whims of the earth and the skies, but develops a dependence upon other branches of life, showing that man always needs allies in his struggle against the forces of nature.

A major benefit of the appropriation of living creatures over dead ones then soon becomes obvious to the man who has captured a few wild animals of the same kind and kept them together, close to him. The members of his flock mate in captivity and give birth to new generations. This implies that the wealth of the shepherd grows larger and larger as the heavenly wheels perform their unstoppable revolutions and new living things are steadily thrown between earth and sky. Man thus directly reaps the fruits of the growth of the tree of life, letting them fall naturally onto his lap, as his only effort is to guard his flock and guide it to new pastures when needed, thereby saving him from the frequent failures of his hunts and sparing him the effort of finding, tracking, and killing prey. The war between man and beast ends with a truce, and the sealing of a partnership, leading to an explosion of the population of both branches, as they find themselves strengthened together, less likely to be crushed by the wrath of the sky or the stinginess of the earth. The flock no longer loses its young to the teeth of the wolf and man no longer sees his children starve when the wild creatures have deserted the forests. The struggle against nature for survival and growth continues, but man is now better equipped than ever to face this frightful giant. He fosters the growth of life, facilitating the mating of his animals, helping them when they deliver their young, caring for them when



they are weak, tending to their wounds when they are hurt.

Branches of the tree of life are then braided together tighter and tighter. Man wears the wool of the sheep over his skin, using its hair to protect himself from the icy winds blowing over his land, resisting the aggression of the heavens. His children are fed with the milk of his goats, allowing his progeny to better fight against death. The line between man and beast is blurred, as the life of both become intertwined. Man also sees his life profoundly changed by this new partnership. He must remain closer to his herd, and this herd goes from pasture to pasture, as the grasses growing on them quickly disappear. But not all men will be shepherds, as some will continue to hunt, securing a greater variety of meat, while others still gather the fruits of life scattered across the land. Others begin to exhibit special skills, like the weaving of wool or the crafting of weapons and tools. Herding becomes one way among others by which man appropriates other branches of the tree of life.

Playing with the nature of life, our ancestors nonetheless soon discovered that this could lead to the emergence of new threats to their existence. Living in large groups, with animals in close proximity with each other and with men, the herds foster the emergence of diseases and parasites, thriving in this mass of living things that continually produce wastes feeding minute forms of life. Plagues thus appear among men, more frequently than before, at times wiping out entire tribes and people from the face of the earth, but nonetheless also favoring a return of a stringent selection, weeding out the weak while the most resistant prosper, a selection that was before that point somewhat undermined by the progress of man's appro-

priation of life, as the domination of his herds allowed the inept hunters, those endowed with weaker bodies or less acute senses, or simply those less able to face hunger, to continue to assume a role in the play of love and war, surviving and fathering children, whereas they would have been far less likely to do so before such appropriation. This forced man to realize the presence of mysterious, invisible threats to his life, which only much later would be recognized as rival branches of the tree of life, inconspicuous but deadlier than the most ferocious beasts of the land, and against which his weapons were powerless. With each step of man's appropriation of life, life thus responds, finding ways to rein in the uncontrolled expansion of man's world that may threaten the existence of the tree of life as a whole, and therefore the healthy struggle between man and life, man and nature, continues.

The aptitude of our distant ascendants to stalk and kill prey have long been forgotten, lost as we frantically raced to build lofty temples of stone or glass and to tighten our grip on other branches of life through various means. The deer is safe under the leafy canopy of the forest, and rabbits can run through the meadows with quietude, as rare are those still able and willing to catch them for their delicious flesh or their silky fur. Almost equally uncommon is the sight of shepherds guiding a flock of frolicking sheep or cows through flowery pastures. Both are remnants of the past of our species, slowly fading away, reminders of already-passed milestones of the frenzied race for the appropriation of life. Herds are now enclosed within fences made of barbed wire and wood, and they no longer leisurely roam the grasslands to feed upon what sprouts out of the earth, the emerald living things steadily growing toward the daystar, fed by its blazing radiance, but rather are nourished by our hands, from the fruits of our fields. We nonetheless still make use of what the first shepherd taught us, the benefit coming from the capture and confinement of particular branches of life.

The juicy meat found on our plates, the fresh milk found in our cups, or even the garments of wool offering us an unequaled warmth when frigid winds and snow enshroud our land are all the result of our appropriation of the lives of sheep, cows, pigs, or fowls, forcibly kept within a miniature world fashioned by our hands, protected from the ravenous wild creatures of the land, the sly foxes, the mighty bears, or the ferocious wolves. Beholding such enclosures on

the border of the roads as we travel the countryside, we may ponder on their place in our world, and the nature of these small worlds, prisons for these noble manifestations of life. Forced to remain there, their existence is at every instant in the hands of their master. They are fed and cared for, but merely as standing reserves of the treasures of life, living meat and skin, kept alive only while they grow in stature or to avoid their putrefaction, if their consumption is to be postponed. Let us attentively watch these humble creatures, noble servants of our world, remarkable tools of our kind, observing the fence keeping them away from the open country, from the unadulterated truth of the earth. Let us honor their sacrifice, their service, neither letting ourselves be overwhelmed with guilt nor turning a blind eye to the nature of their slavery, simply acknowledging the crucial role they play in our world and our life.

The living beings filling our plates and stomachs, warming our shoulders or protecting our skin, are no longer brought into our world as the result of a mere whim of fate, placing them upon the deadly path of the hunter. They are born as our captives. We extract them from the belly of their mother and separate them from her so that they would fulfill the purpose we set for them, at the appointed time. We ruthlessly plunder these branches of life as we rob the entrails of the earth for resources, and they have much to offer us! They appear like a cornucopia, left at our disposal by the heavens themselves. As long as our world knows peace, famine remains a distant memory, as minimal efforts are needed to ensure the survival of those who efficiently appropriate life. We can afford to let go of our elegant garments of leather and wool, since they can now easily be replaced with other materials, but we may nonetheless wonder what we would befall us without the sacrifice of these unwilling servants, butchered for our daily sustenance. How long would we survive if we were condemned by fate to wander in the forest to hunt wild animals to eat, had our ancestors failed to discover the astonishing power of captivity, the incomparable benefit that comes out of the narrowing of the world of these poor creatures?

Even presently, the countryside of many lands nonetheless remains teeming with wildlife. Some of these untamed creatures are voluntarily preserved for our selfish enjoyment, but many others also play an inconspicuous and yet essential part in the survival of our world. All the branches of life are indeed in balance with one another, and they contribute to the stability of the whole they form. The sparrow or the nightingale are not considered valuable enough

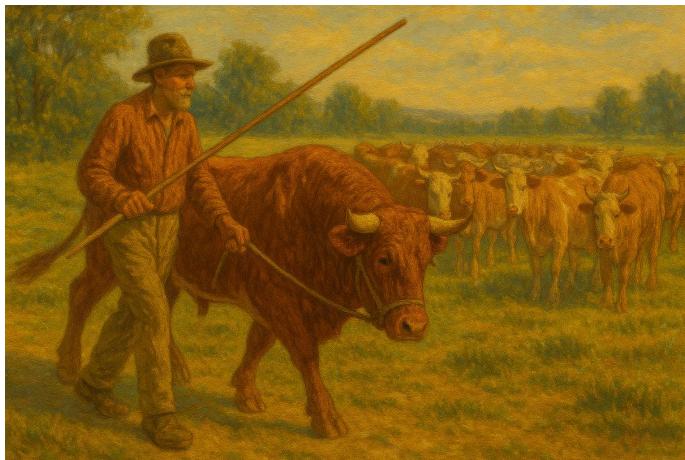
to be appropriated and become cogs of the titanic machinery of our world, but this world may nonetheless crumble if their discreet contribution was to vanish. Without the appetite of the winged lords of the heaven, leading them to feast on insects, these would proliferate uncontrollably, ravaging the land, devouring the crops upon which the survival of our livestock, and ours, significantly depends. We may exert great control over the tree of life as a whole, but our world still rests firmly upon it, like a tree-house. Contemplating these branches remaining wild and free, untamed by our greedy hands, we may acknowledge the endurance of our dependency on the rest of life, recognizing the intertwined nature of the arms of this majestic tree, and remain humble as we face forces greater than us, forces that may one day still prevail over our species.

2.7 Breeding - Shaping Life

By capturing the creatures of the wild, the beasts of the open country, our forefathers slowly grew more and more familiar with them. They created a small world for these animals, a habitat containing what they needed to continue to live, still ruled by the play of love and war but kept safe from the dangers of the land. Like an all-seeing eye, a deity watching from the sky, man observes the life of his flock and intervenes when the order of this miniature world is disturbed. Their lives have few surprises, few adventures, and all that they do is obey their instincts, the impulse seizing their flesh, pushing them to eat and drink to feed the fire of life within their skin and find a mate with whom they would give birth to a new generation, carrying on this fire when they will be gone, devoured by our kind or reclaimed by the earth.

Observing the herds all his life as he guides them from pasture to pasture, the shepherd soon notices that beasts, like men, inherit some of the traits of their parents. It is as if the color of a young animal's fur was painted using those of his parents, blending their hues with a touch of randomness. The parents with the largest stature also give birth to young animals larger than others, and even behavioral traits such as meekness or aggressiveness are found to be passed on from generation to generation, to a certain extent. Witnessing this inheritance mechanism, not yet understanding the details of its functioning but nonetheless acknowledging its effects, the lust for control of the shepherd, lord of the beasts, is suddenly re-awakened.

After having appropriated the animals of the wild for their meat by hunting them, after having learned to appropriate the essence of their meat by cooking it to gain more nutrients from it, and after having appropriated them alive by keeping them captive, man sees the opportunity of a further appropriation. Now, it is the very growth of these branches of the tree of life that he intends to control. He is no longer satisfied with merely guiding the herds through the grasslands. He wants to guide and shape the branch they represent, by becoming the director of the play of love and war in which these beasts are the actors. He is not satisfied by the pace at which this play of life is unfolded and wishes to accelerate it. Neither is he content with the natural outcome of this play, as he watches animals he considers superior, that is, more capable of being useful to



him, producing no more offspring than others. The war between the creatures to mate with the most desirable partner appears insufficiently fierce to the shepherd, and the traits loved by them may not be those he wishes to see in his herd. He thus decides to intervene.

The play of love and war can be abruptly interrupted by the lord of the herd, as he cleaves its members' world with its wooden staff, separating males from females and leading them to different enclosures. He thereby suspends the growth of this group of living things, not allowing them to seek the love of a mate and wage war against rivals. He knows that the females normally hold the key of love, as they choose who will father an offspring through their agency, mingling his essence with hers, but he now forcefully takes this key away from them. He is now in charge, and meticulously judges the males assembled in their pen. For each branch of life that he keeps captive, he chooses a series of traits he would like to favor. The traits selected through the play of love and war naturally unfolded when the creatures are offered the freedom to select their lovers and mates are those favoring a greater fitness of this branch of life to the part of the earth and the sky between which it grows. Those chosen by the shepherd are different. His goal is usefulness for the edification of his world, service to his branch of life rather than fitness to live between earth and sky. This man does not care for the health of the tree of life itself, but rather wants to maximize the exploitation of the branches of life under his control.

The male exhibiting the desired traits is then invited to enter the enclosure of the females. He alone is allowed to mate with them, winning the love of all without having waged a war against his ri-

vals. The inheritance of the other males dies with them, while the next generation appears more similar to those selected by the owner of the flock. Continued generation after generation, the choices of man slowly transform this group of animals, causing them to diverge more and more from their wild cousins, ultimately forming separate branches of life. This does not imply that man exerts total control over these branches. Unbeknownst to him, life itself still controls the way the traits of the parents are blended together, and random mutations still occur, fostering the appearance of new traits that may be selected and favored. His appropriation of the middle realm nonetheless reaches a new dimension, as he slowly transforms entire branches of the tree of life through selective breeding, leading to the emergence of new creatures, significantly different from those found in the wild, those shaped by the natural unfolding of the play of love and war, by the forces of nature rather than the hand of man.

Boars captured in the wild are carefully selected for their lack of fur, their stature, their fatness, and their submissive nature. The bloodline of those not meeting these criteria is brought to an end, while the one of those that do flourishes considerably, being traded with other men and brought into new lands, slowly scattered across the earth. The boar has been turned into a pig, a creature whose body has been tailored to fit the uses man has for it. Its almost hairless skin is easy to transform into leather, and its juicy, fat flesh is soon found on the plates of most men.

In the four corners of man's world, dogs are also bred according to a wide range of criteria. In some parts of the earth, smaller breeds are favored, with a meek character and an inoffensive appearance. They become house pets, creatures whose sole purpose is to be companions. In other places, among other peoples, larger breeds are created, preserving the sharp senses and the strength of the wolf but giving them a less ferocious temperament, making them ideal shepherd dogs, working to serve man in his appropriation of other branches of life.

Man is no longer a mere branch of the tree of life, shaped by the play of love and war, the earth and the sky. His work of appropriation of life has now made him both a branch and a gardener of the majestic tree. He trims these branches when they damage his world or go contrary to the vision he has of what the tree should be. He guides the growth of some of them, and shapes the form they take to fit the needs of his world. These creatures, the branches, become

more and more intertwined with man's world and grow more and more remote from the earth and the sky, the open country, so much that the members of many of them completely lose their ability to survive in the wild, as their flesh and their character have been damaged beyond repair by the hands and the will of the builders of our world. Left to fend for itself in a forest, a poodle would have few chances to survive on its own, having lost the qualities that its ancestors developed to resist the rage of the sky and the assaults of other beasts. The longer these new branches have been subjected to the influence of man, the less likely are they to recover from their captivity and once again enjoy life in the wild. Their fate is now tied to our own, or to the role they play in our world.

The appropriation of the breeding of living things is nonetheless not limited to the beasts snatched in the forests or caught in snares. Man indeed soon discovered that the work of selection, the shaping of a branch of the tree of life that it represents, may be applied to himself as well. Desiring to vanquish their enemies, to embody strength and might, ancient peoples began to offer the weakest of their children to the earth and the sky, exposing them to the elements until they died, considering that they thereby improved the health and strength of their people.¹ Others would select the most valuable men among the people and invite them to father children with several women, hoping that the next generation would be stronger than the one of their parents. These attempts nonetheless always remained anecdotal, as men are naturally unwilling to forego their desire to pass on their own traits to improve the whole of the branch that they form. They refuse to be treated as cattle, and even the weakest among them can revolt together against such attempts, knowing that the play of love and war is the center of their existence, and they are thus willing to sacrifice anything they have for a chance to prevail against those waging a war against them, denying their right to father children, and for a chance to find love, whose fruits will be those carrying on the fire of their life when they will have returned to the ground.

Every son of man is the living fruit of a bodily union, a manifes-

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See: Cynthia Patterson, "Not Worth the Rearing: The Causes of Infant Exposure in Ancient Greece," *Transactions of the American Philological Association* 115 (1985): p103-23

tation of love and desire, the result of our dutiful obedience to our most deeply entrenched instincts, calling us to extend our existence through the kindling of a new spark of life, which will carry on our legacy once we will sleep in the obscure entrails of the earth. We, like all the animals swimming in the sea, roaming the dry land, or flying through the sky, are a seamless blend of the essence of our two parents. Even if they have deprived us of love or earthly possessions, they regardless have offered us the most precious of things: the essence of their being, a part of their nature as our birthright, one that can never be lost nor be taken away from us. Conscientiously observing our hands, our face, our eyes, we may see in them spitting images of our parents, recognizing part of the course our bloodline took on the tree of life, seeing these vicissitudes marked upon our skin, our hair, or the contours of our eyes, acknowledging these ancient seals of our belonging to a single stem. We may now wonder what led both of our parents to decide to irreversibly bind their existence together by giving birth to us. What was considered attractive in the eyes of the other, that they would favor this person over countless others? Human being, just like wild animals, are actors in the play of love and war, and our presence here today is the result of this grandiose process.

The members of our species are nonetheless not necessarily mere passive actors of the play. Some are indeed more than mere parts of the tree of life: they also tend to its growth and are attentive to the nature of certain of its branches. Directing the play of love and war, and deciding which animal will pass on its essence to a new generation, they surreptitiously but profoundly change the creatures of our world. Looking at the multitude of races of dogs, most faithful companions to our species, we may notice that their incredible variety is not simply the result of the effect of the flow of time or the product of the struggle for survival of these creatures. We, as a branch of the tree of life, shaped wolves into this wide palette of animals, tailored to fit our needs, modeled to obey our every whim. In some, we took away the bloodthirsty and ruthless nature of their fathers, replacing it with obedience and docility. In other, we reduced their stature, to make them appear endearing and charming. Let us contemplate the discovery made by our forebears, how by influencing the play of love and war we gained the ability to create new branches of the majestic tree of life, branches that now only share a very faint resemblance with their wild ancestors. Considering the food in our plate, the leather and pieces of fur borne by our shoulders, we may reflect on

the astonishing power exerted upon the branches of life to which they belong, and on how we subjugated them, making them part of our world, many of them too far gone to return to the place of their origin, to live in harmony with the earth and the sky, and they are now condemned to servitude, depending on our hand throwing them the crumbs that become their nourishment.

Even if we are nowhere near places where livestock is bred, we can nonetheless also play a small role in the shaping of our own branch of life. When we choose a lover with the intent of giving birth to an offspring, the criteria guiding our choice will very slightly steer the direction taken by our branch of life. Our capacity to reproduce, to kindle new sparks of life, or to refrain from doing so, gives us the power of fashioning a new generation. Unable to gain the favors of a perfect partner, most will be forced to choose between beauty, strength, health, kindheartedness, or intelligence, and this decision will impact the future of mankind, reflecting our own values. Let us now examine our conscience and our role in the grand play of love and war. Is my inheritance, carried in the innermost parts of each one of my cells, truly worthy of being passed on to a new generation? Will man's world be a better place with more people like me? Would I be able to renounce my right, to forsake the instinct inviting me to pass on my legacy regardless of its worth, for the greater good, for the health, beauty, and greatness of the tree of life as a whole?

2.8 Planting - Fostering Life

The things of the earth that man possesses inexorably weigh him down, rendering him less mobile, less able to explore the vast expanses of the open country. His objects of stone, wood, or bone need to be carried when he decides to dwell in a new part of the earth, and if he possesses a herd in need of new pastures, the pace of his exploration is limited by the speed of his flock. An abundance of possessions therefore invites him to settle down in a specific region of the dry land. Watching the work of the skies upon this patch of land, the consequences of the turning of the heavenly wheels, season after season, man witnessed the seemingly miraculous resurrection of the plants of the land during the springtime. He saw how new parts of life emerged out of the sooty soil, and pierced the face of the earth to extend their emerald hands toward the sky, toward the iridescent fountainhead bountifully showering life with gilded light. Eating the fruits of the trees and spitting the kernels and seeds around his camp, letting them fall onto the ground and be reclaimed by the mud once rains are poured onto the soil by the thundering clouds, he finally perceives the link between seed and plant. He unlocks the secret of the reproduction of these plants, now seeing in each seed and kernel the grown living things that they may become in the years to come.

At first randomly burying seeds into the ground, and watching how few of them sprouted out of the earth, man then patiently learns the art of planting. He learns when is the appropriate season to plant each variety, and when will the time to reap the fruits of his efforts come. The necessary conditions to foster the growth of these new living things slowly become apparent to him, such as the role played by water, by the sun's light and heat, or the nature of the soil in which the sparks of life are kindled. In the wild, these conditions are seldom all met, and thus few of the seeds become new plants. Man nevertheless is slowly accumulating knowledge of the needs of these plants, passed on from generation to generation, as he patiently observes them sprout, grow, wither, and die. The art of growing plants becomes a crucial skill for the standing creature. This activity slowly becomes more extensive and is prepared more carefully. Large swaths of land begin to be cleared around his home. Trees are uprooted and burnt, and large stones are thrown away, to leave only the rich, sooty soil made of the decomposed remains of countless generations of living things, which serves as a womb to the seeds of the emerald beings. One by one, when the soil has been



softened by the moisture of the heavens, the seeds are inserted into the ground, buried before they have begun to live, buried so that the fire of life may soon enthrall them. Then, man waits for the earth to labor for him, and for the sky to do his work, eagerly observing his field each morning, expecting life to rise from this earthly grave.

The days, months, and seasons pass, as man contemplates the work of nature, in a small parcel of land, helped by his own hands. Bathed in water and light, the seed turns into a shoot, and then into a full-grown plant, grass, or tree, but these new lives must at all times face the dangers of the earth, life, and the sky. Some are drowned in floods, while others are taken by the frost. Some are parched by the fiery orb in the sky, while others are devoured by insects. Witnessing his effort being ruined, the farmer does what he can to defend his protegees, the crop that should feed him during the coming months or years. He chases away the creatures of the land impudently invading his fields and diverts the flow of the rivers to water them when the vaults of heavenly water remain locked, inexhaustibly shaping the earth itself so that life may grow. After a long battle, during months for small plants but years for trees, the time of the harvest nonetheless soon approaches. When the sun gloriously reigns over the earth and the sky, during the bright months, the stalks of wheat and barley have grown high, and the spikes carry numerous seeds, a sign of the growth of life, which from one produce many. Wielding a sharp, curved blade, the stalks are cut and the grain is separated from the chaff, before it is crushed by the millstone and turned into flour. Prepared with water and salt, before being baked in an oven, this flour becomes a loaf of bread,

eaten with merry songs of celebration, with thanks to the earth and the sky for their generosity and pride in man's achievements.

Life is thus appropriated in a new way. The methods first employed to create walking reserves of meat by domesticating and herding wild animals are now applied to another of the largest branches of life: plants, the light-weavers transforming the sun's powerful radiance into living things. As man did with animals, he also selects plants for their resistance to the whims of the sky, the speed of their growth, or the number of fruits or seeds they produce, slowly shaping these branches of life according to his needs. Their evolution is no longer driven by the play of love and war, their capacity to survive and reproduce better than others, but rather by man's hands and will. The traits that are favored are those that serve man rather than the plant itself, and it thus slowly loses some of its aptitude to thrive in the wild, growing more and more dependent on the standing ones, who prepare the soil, plant seeds, water them, and tend to their every need. Man appropriates the plants, not only their fruits and their stalk, but their very nature, their branch of the tree of life as a whole. Like the herds kept inside pens, they are separated from other living things, from the wild, thrown into an enclosure made by man's hands at birth, a miniature world he can control to a greater extent than the rest of the earth. The fields are the farmer's dominion, and he rules the living things taking roots in its soil, even though they remain largely at the mercy of the whims of the heavens. They are parts of his world, and no longer belong to nature, and thus begins one of the most profound transformations of the face of the earth.

The appropriation of the plants has great repercussions upon both the earth and the world. When man relied on hunting and gathering to feed himself, he needed to frequently explore new parts of the land, as the gifts of life were quickly exhausted, or became insufficient to feed a growing population. Starvation certainly was common, and only the healthiest children would have reached adulthood. Herding alleviated these difficulties, providing a living reserve of food that could be accessed reliably and almost effortlessly. Animals nonetheless need frequent care, and they demand large pastures and long years to grow, rendering it difficult to exclusively rely on them for food. The appropriation of the plants profoundly changed this situation, as the amount of land that could be turned into fields then appears almost boundless. The more field one possesses, the more people one can feed, without any upper limit, but a decisive

element that caused certain varieties to become staple foods is their ability to be preserved for years without being destroyed by putrefaction, unlike raw fruits and many vegetables. Grains of wheat can indeed be stored almost indefinitely, providing invaluable reserves of nutrients in case of long periods of inclement weather, plagues affecting the plants, or wars between men affecting food supply, reserves that do not need to be cared for, contrary to roaming herds of animals. The amount of food available to mankind thus explodes, and so does the population of human settlements. This sudden wealth, the result of a deeper appropriation of life, nonetheless comes at a price, one that is paid with few men even realizing it.

Possessing more and more parts of life, man becomes more and more possessed by it. The fields that he tills become anchor points to which his life is attached, as he can no longer wander in the open country in search for prey, love, or adventure, because he needs to tend to his fields or orchards, feed his cattle that are now fed with grain and chaff rather than the grass of wild pastures. His world would crumble, his wealth would vanish and a lifetime of efforts be ruined if he were to abandon his home for a single year. Having lost the skills necessary to live off the land, his existence now rests upon these vast fields and the fat cattle fed from them. Man and the plants and animals living in his world now represent three large branches of the tree of life tightly intertwined with one another, inseparable and unable to survive without the others. Man is thus enslaved by the plants he appropriated as they are by him. He rises early to protect them from the wild beasts and spends countless efforts to shape the earth to fulfill their needs. He staunchly defends them from the sun and the frost by shielding them in greenhouses and spreads the dung of his cattle over the soil to give them strength. He brings fresh water from far away to quench their thirst and kills the weeds stealing their resources. The branches of life that are planted effortlessly fulfill what life expects of them, as they reproduce in greater numbers than they would ever have without the intervention of man, while the standing creature breaks its back serving them, only extracting his tribute, an offering by the plants to keep him alive, working for their growth, watering their roots with sweat and tears.

The relationship between man and the earth is also profoundly changed by the appropriation of the growing of plants. Bound to a particular part of the earth that he cleared and now tills, he grows *attached* to it. The earth ceases to be a mere support for life, an underworld, and it now becomes a provider, the source out of which



food miraculously sprouts to satiate his hunger and allow him to remain above the earth for a little while longer. The stones found in the fields are used to build large houses, inhabited across generations, and the love for this land is passed on as an inheritance to them, along with the knowledge of the earth necessary to ensure successful harvests and a long, fruitful life. Man's relationship with the sky is nonetheless equally transformed by this new appropriation, as he now needs to understand the signs displayed in the heavens in order to anticipate the arrival of the frost or the coming of a drought. He grows more intimate with the celestial spheres, as his life now more than ever depends on the whims of the heavens. The sedentary life caused by this new appropriation also leads to the weaving of new bonds between men themselves, as the harvests of the staple crops often come at a single time of the year, demanding that all men, women, and children all labor together to reap and prepare the grain that will feed them during the coming year.

The dwellers of cities, nexuses of our world, may be suddenly struck by a desire to depart from the suffocating maze of concrete towers they call home, responding to a call of the wild, an invitation of nature, luring them to once again plunge themselves into a landscape bearing no trace of the hand of man, having yet to be soiled by the vices of our species. What we find beyond the borders of our concrete hives is nonetheless rarely a pristine, wild expanse. All along the roads strenuously paved by our ancestors, fields extend to the horizon of the countryside. Neatly aligned in parallel rows or randomly scattered in a compact, homogeneous mass, they

represent living fields, but they are also parts of our world, just like the buildings forming our man-made metropolises. We may contemplate this work of mankind, these endless fields covering the face of the earth, and wonder about the appearance this land once had, before we made it ours and offered it to be the exclusive domain of select varieties of light-weavers, that we may feed off their grain, their leaves, or their roots. Thick forests or vast grasslands, we may imagine the prodigious effort it took to clear them and turn them into seemingly void patches of open earth, ready to be inseminated by our hands. These fields were watered with the sweat and blood of our parents or those who conquered this land before them, and we now stand in awe of the titanic scale of their toil.

The perplexing vision of the immensity of the fields of a bucolic scenery, the outskirts of our world, nonetheless reminds us of what we owe the heavens and the earth. If freshly tilled or sown, these fields appear as plane surfaces where the earth intimately encounters the sky, with the middle realm completely out of the picture, but when the stalks quiver with the summer wind as they are flooded with the fire profusely poured down from the heavens, the place of life becomes manifest. Caught between two hands of nature, the earth below and the sky above, the living things we have planted are no longer in our hands. Their fate largely depends on the benevolence of the heavens, as the fire of life animating them is fed with water and celestial brilliance, respectively dispensed by the clouds and the sun. We can hardly rein in the rage of the sky. We may divert some water or shield small areas from icy winds, but we would be powerless to resist for years the anger of the realms upon which the tree of life depends. Despite all our knowledge and our mastery of the earth and life, a brief but violent downpour of hail or a frigid wind blowing for a single day may bring to naught an entire year of strenuous labor. Watching these living things grow, let us see in them our own survival, the victuals that will adorn our table and fill our plates and belly during the coming year, appeasing our hunger and extending the length of our days above the earth.

To properly appreciate the profound significance of the appropriation of the plants by mankind, we should nonetheless experience by ourselves what their growth implies. Planting even a single seed of a common crop or herb into a loamy, fertile ground and waiting for it to pierce its surface before it extends its delicate, emerald arms towards the heavens, in a thankful gesture, we may learn the amount of care such a miracle demands from us, as we water the

nascent plant each day, protect it from an overwhelming presence of the daystar, or defend it against relentless onslaughts of insects, fungi, or rodents seeking to devour it. When the time of our small harvest comes, we may ponder on the satisfaction coming from the reaping of the fruit of our modest labor, and the merriment of eating the products of a life we nurtured with our bare hands. Conscious of the effort the growth of a single plant represents, we may honor the toil of the farmers who sacrifice their health to ensure that our world does not grow hungry, starve, or wither before being reclaimed by the earth. These industrious hands are the ones who preserve the legacy of our forefathers, continuing to appropriate the light-weavers and fill our granaries, living a life of intimacy with the earth and the sky, of which the dwellers of the cities remains ignorant. We may also contemplate our own impotency, as we are now helpless to survive on our own in the open country. Our existence and the very pillars of our world as a whole, entirely rest upon the work of these farmers, the foundation of our modern life. Trying to live off the land by gathering edible plants, realizing the benefit of agriculture by feeling the hunger seizing our flesh, we may then fully appreciate the gift that the subjection of the life of these plants represents, a gift offered to us by our ancestors, and we may express our deepest gratitude to them.

2.9 Healing - Saving Life

Every living thing is an island of life briefly standing out of an ocean of death, before being engulfed by the inexorable tide. These living things are nonetheless not passively awaiting death. They rather wrestle it, ready to wage brutal wars against every other part of life to prevent the quenching of the fire entralling their flesh. The living have few friends and lovers, but countless enemies and predators. Even the paragon of life, the apex predator and marvel of inventiveness that man represents, is frequently struck down by the simplest, most minute forms of life, invisible to the naked eye but incredibly deadly. Man, like every other living being, is therefore thrown into an all-out war. He is condemned from birth to strive against both life and death, against the earth, life, and the sky, protecting his body against the unceasing assaults coming from all parts of the creation. He is a thin pouch of blood, easily pierced by the craggy face of the earth. He is a reserve of food for other living things that can feast upon his flesh and extinguish his life. He is a droplet of water caught in the winds, illuminated by the sun, easily evaporated by the forces encompassing the earth. Early on, man thus becomes familiar with death, the putrefaction of bodies, as he sees his loved ones die of plagues, hunger, or poison, and his enemies being reclaimed by the earth after their blood has been spilled over it.

Living in close proximity to death, the first men slowly learned to establish causal links between things and events affecting a body and the extinction of its life. Watching the crimson liquid of life gushing out of his skin, he knows that his life is in peril and that the precious substance must be kept inside him at all cost. Seeing the flesh around a wound becoming putrid, he learns that the corrupted part must be cleaned with fire or cut out to avoid it from spreading and leading to death, even though he ignores the causes of such phenomenon. His world thus begins to accumulate knowledge concerning the relationship between life and death. Man learns how to destroy and how to save life, through innumerable experiences, whose results were passed on as tradition.

Light is then shed upon man's nature, as the machinery of the body is unhurriedly unveiled. The body itself appears inside his world, as an object of study, and the guardians of the knowledge associated with it are held in high esteem, as most remain ignorant

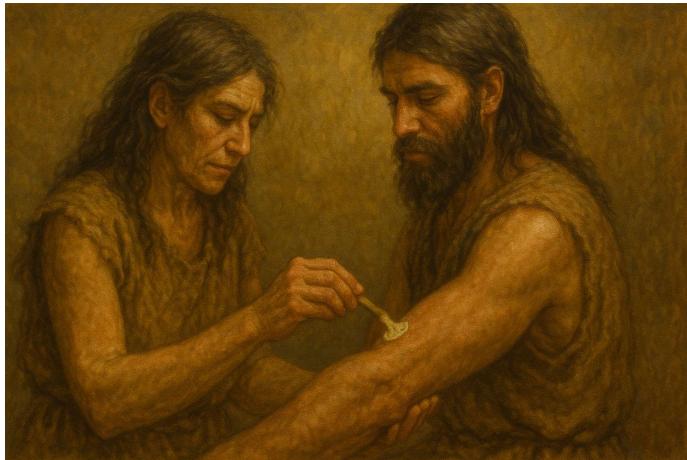


of the subtleties of our nature. Man is no longer a mere whole, he also becomes a sum of a great number of parts, with a skeleton made of two hundred and six bones, great lengths of blood vessels, muscles, or nerves, and numerous organs. He now appropriates his own body, as he appropriated other parts of life, and learns that he can apply the agility of his hands to heal himself and other members of his branch of the tree of life. The skills he learned while butchering animals or sewing clothes can be used to save. An open wound can be stitched with a thread and needle, ensuring that it remains closed, then letting the body seal the skin naturally. A saw can be used to amputate a limb that is irremediably damaged and threatens to take the man to whom it belongs back to the earth with it. This allows man to resist the attacks of the earth upon his species. When the pull of the lower realm causes him to fall and crush his bones, he is no longer condemned to return to the ground. When pointy parts of the face of the planet, or the sharp claws of an animal, earthly material attached to a living body, slash his skin, his fate is no longer to see his precious blood water the soil, before he is himself buried in it. Wielding earthly tools to repair the damages caused by the earth itself, the surgeon is a defender of life. The staunchest assaults upon mankind nonetheless do not come from the lower realm, but rather from life itself, demanding the discovery of more subtle means of healing.

Having appropriated the earth and shaped it to create secure houses in which he would be safe from the beasts roaming the open country, man seldom fears the larger forms of life inhabiting the dry land. His doors and locks are nonetheless powerless to stop the

inopportune intrusions of minute living things carried by the air or covering his frail body. Fungi, bacteria, viruses, or various parasites see us as inexhaustible reserves of food, in the same manner as we look at our cattle or the beasts of the wild, or as a perfect habitat. Small in stature but incredibly numerous and inconspicuous, they not only colonize our skin but also penetrate our body. They can flow inside our blood, enter our flesh, contaminate our organs, leaving us at their mercy, as we become their pantry and their home, appropriated by these seemingly lower forms of life. Such internal threats to our existence may nonetheless also be caused by larger creatures, such as the plants and animals dwelling in our world. Themselves resisting the attacks of other branches of life, certain plants indeed secrete poisons in their leaves and fruits, rendering them not only unpleasant to eat but also dangerous. Entering our blood through our mouth or our skin, such substances can severely disrupt the machinery of our body, even leading to a total collapse, death. Fortunately, man soon finds allies among the great diversity of plants and herbs sprouting from the earth. What may be poisonous to some may heal another, and thus the medicine man begins to explore the effects of the various substances found in living things in general, opening up a new branch of knowledge within his world.

Finally, the upper realm also frequently represents a menace to man's existence. The sun can burn his skin and cause irreversible damage to it, transforming it into a fertile ground for minute living things and possibly leading him to an early grave. The prolonged exposure to icy winds and snow may cause limbs to be frozen and subject to putrefaction. Man thus wages a war on multiple fronts, against the earth, life, and the sky, but these attacks can be distinguished according to the way they affect him. One way by which man is threatened is through the wounding of the body, visible damage inside or outside the body caused by either one of the three realms, which can be repaired or whose effects can be reduced by the surgeon. The other is the attacks, either visible or invisible, inside or outside the skin, that can only be treated by the medicine man, through the use of ointments or the ingestion of substances countering their effects. Possessing an extensive knowledge of life, the healer can wield plants as tools to defeat an infection, exterminating minuscule forms of life that have crept inside the patient's body by administrating a substance toxic to them but not to man. Whether man is seized by fever, by tremors, or simply too agitated, nature has



already devised substances that may act as remedies to each symptom, only demanding that man appropriate this knowledge, not even needing to understand the way this war is waged, the exact nature and effects of these remarkable substances on the body.

The deepening of man's appropriation of life that occurs through the development of the knowledge and practice necessary to heal living things leads to a strengthening of the bonds uniting men with the rest of life. The surgeon does not operate on his own body, and the medicine man does not restrict the use of his remedies to himself. Their knowledge is used to heal the living, including the creatures that have a place of choice within man's world, such as his pets or his cattle. They are rewarded by the world for their efforts, and men enjoy longer lives because of them. The tree of life thus appears stronger than ever thanks to this new appropriation, but one should notice that this comes through an always tighter intertwining of the branches of life involved with man's world. Influenced more and more by the hand of man, the growth of the tree is less and less natural. The play of love and war through which living things were selected and branches of life evolved since the inception of life become less relevant. The work of refining of life performed by the earth, life itself, and the skies is countered by the efforts of the surgeons and the medicine man. Wielding their knowledge as a weapon against nature, they save those who would have been taken by war, disease, or imprudence. They heal the bodies that would have been reclaimed by death and the earth, and allow them to pass on their essence to a new generation. The search for love, another human being with which new lives will be created, remains a decisive driving force for

the refining of our branch of life, but man ineluctably grows more and more dependent upon the healing techniques of his world, and he may therefore be seen as becoming weaker in the process, as an individual isolated from his world. Stronger within the boundaries of our cities, of our world, we are weaker when we cross them and enter the places ruled by the forces of nature.

Life has always mastered the art of tending to its own needs. Our evolution, product of the grandiose play of love and war, is an incredibly long arms race unfolded throughout the ages and across continents and oceans, with living things ferociously striving against their peers and other branches of life, or against the gigantic forces of nature. Patiently refined generation after generation, our body evolved various means to defend itself from the staunch assaults of the earth, life, or the skies, exhibiting an astonishing aptitude to heal its own wounds. We may remember a time when we broke one of our bones, and witnessed how it slowly became whole again, repaired without us being conscious of it. We may recall our skin being pierced or scratched by stones as we fell on a gravelly ground, and how it healed naturally, without us knowing how. Finally, having already been afflicted by a sudden illness having considerably depleted our strengths, we may reflect on the way our body fought this intrusion, secreting substances that decimate the minute living things flowing through our veins. Without the ingenious defense mechanisms patiently uncovered by life, through entire eons, would we be counted among the living today? Let us be mindful of the presence of this invisible armor of life that we bear under our skin, and which defends us from the fury of nature and the vehemence of other living things. We now feel safe, protected by this true marvel of evolution, this intricate masterwork of life.

In spite of its magnificent nature, our natural armor may nonetheless often be defeated by the violence of the earth and the sky, or the insidiousness of other living beings. When we think this line of defense may be breached, then do we appeal to the knowledge of our forefathers; then do we invoke the remarkable power of our world to prevent the sudden extinction of the flame of life burning within our chest and our return to the opaque abyss of the lower realm. When a fever causes our forehead to feel as if it was set ablaze, we know we can acquire substances to dispel our torpor, medicines helping us tune certain unconscious functions of our body or fight against the

intrusion of uninvited parts of life. The wide palette of substances discovered by mankind is nonetheless not only effective to alleviate the ailments of the flesh, it can also soothe the troubles of the mind, or even alter our vision of the world into which we are thrown. Using elaborate products of life or those more inexpertly made by man's hands, we can change both our body and our mind, using them as tools to appropriate our own nature and heal the wounds afflicting us. We may now reflect on our experiences with such substances, on the effect we recall them having on our body or our mind. Let us appreciate these fruits of the labor of our brethren, supplementing what life generously offered us, allowing us to experience the bliss of being for numerous years. Let us imagine their grueling efforts and feel content knowing we have such a wide array of medicine at our disposal, ready to save our life, snatching us back from the grave, deflecting the sharp scythe of death.

Most of us nonetheless have only acquired a very rudimentary knowledge of the machinery of our flesh and of the ways to fight against what threatens it. We rely on others for the preservation of our health, experts in this arcane art, who wield their blade upon us when we need it, or administer us mysterious potions, people who devote a large part of their life to such practice. They are the priests in charge of our healing, sheltered in temples devoted to this knowledge, occupying a prominent place within our world: infirmaries and hospitals. But even within the bounds of our home, we may find tabernacles celebrating this wisdom, often in the form of cabinets in our bathroom. There, we keep a selection of medicines and some of the instruments needed to treat common injuries or sickness. We may contemplate this small altar devoted to the service of our body, noticing the place it occupies within our living space and within our lives. This is the fruit of the appropriation of our own flesh and bones, a heritage passed on to us since time immemorial. It keeps many of us alive, but we shall regardless also notice the role it plays in the undermining of the work of selection operated by life itself on our branch of life. We may wonder if by saving every individual we may not be weakening the entire tree of life, potentially putting its future in jeopardy.

2.10 Manipulating - Designing Life

During most of man's history, the nature of life remained shrouded in mystery. For a long time, it was thought that the middle realm was made of a substance fundamentally different from the earth under our feet or the celestial bodies adorning the firmament. As our appropriation of nature became more complete, we nonetheless discovered that life was a phenomenon rather than a substance, a fire entralling parts of the earth, a chain reaction that continuously transforms matter and spreads through growth and reproduction. The earth began to be seen as a gigantic mass of atoms and particles, as the standing one became able to look at it in incredibly fine detail, allowing him to finally begin to peer into the nature of life. Light was suddenly shed upon the mystery of life, with the discovery of the long chain of molecules defining the body of every living being, and of the mechanisms linking the sequence of these molecules with the features of a body. This infinitely small chain nonetheless represents something more than the blueprint of our flesh, it is also a book of life, a record of the path it took from the first spark that ignited this chain reaction until our parents and ourselves, offering us a broad vision of life's evolution.

Life still stubbornly keeps many of its secrets, but man can now appropriate it on a new level. The long chains defining living things do not represent a language, nor a blueprint in the sense that it does not directly describe any of the features of life. It rather represents an incredibly large set of switches that can be set on different positions, and these positions influence the way the chain reaction of life turns earthly matter into living things. These living creatures are thus as much defined by the laws ruling the earth and the sky as by the long chain itself, with life representing the interplay of both. Standing in front of this giant wall of switches, man first randomly changes their position and sees what effect it has on a living thing that grows following this pattern. Monsters are then created, creatures that have been deprived of a part of their inheritance, meticulously refined by life through the ages, and thus are brought to an early grave because of man's impudent intervention in the work of nature. Meticulously recording the results of these audacious and frightful experiments, knowledge of life is slowly acquired, brought into his world.

Man progressively learns the effect produced by certain sequences



present in the long chains, and develops sophisticated techniques to edit them, even merging sequences belonging to different branches of the tree of life. He is now able to manipulate the essence of living beings, and therefore change the very nature of entire branches of life, not only guiding their growth in the direction he chooses but also changing the essence of the branch itself. This marks a decisive step in man's appropriation of the middle realm, as it can profoundly change the course of the growth of the entire tree of life, the course of its evolution. He now has the tools to steer life as a whole in the direction he wishes, rendering the play of love and war potentially obsolete. The powerful movement of appropriation of life by man therefore goes further and further, and even his own traditional techniques of appropriation soon become too limited to satisfy his ambitions. Breeding is slow, and it still leaves life in charge of discovering new features through random mutations, severely limiting the emergence of original and useful traits. Editing the long chains, even randomly, he can trigger a cascade of transformations, so great that many of the resulting beings are not viable, but he can thereby attempt to explore untraversed paths of life. Easier and more promising, the merging of the essence of different branches of life allows living things to be endowed with the "tools" of another, or deprived of what nature gave them. A mouse can be made to glow in the dark or grow a human ear that can be offered to someone

lacking it, and a watermelon can be deprived of its seeds to make it more pleasant to eat. Man is often careful not to release these new shoots of life into the wild, and he restrains their growth, but such an in-depth appropriation of the essence of life is not without danger.

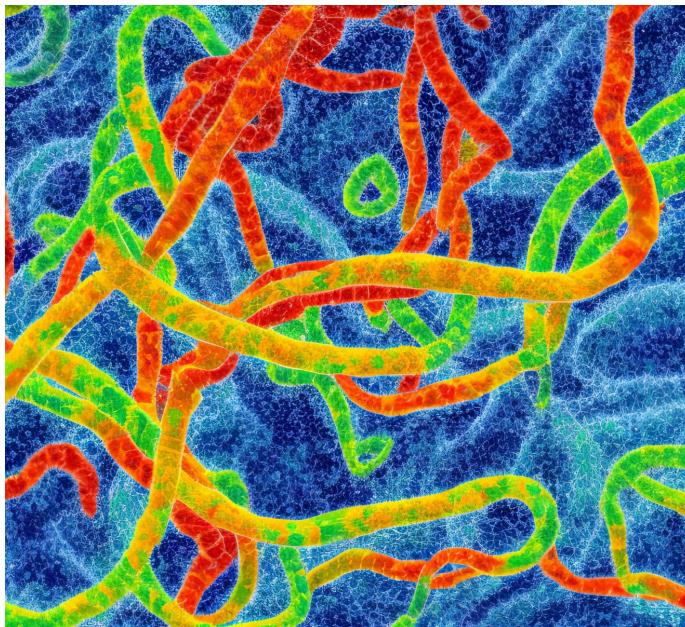
Man may have now discovered techniques allowing him to manipulate life, but this nonetheless does not mean that he truly understands it. Even when he has observed the effect of a particular modification of a long chain, and believes to have grasped its significance, this does not mean that his intervention does not have other effects that are less conspicuous and therefore remain unnoticed. He may think he has improved a branch of life that serves as our food, making it more resistant to insects or fungi, and then decide to progressively replace the natural variety with the one transformed by his hand. This intervention on a particular branch of life may nonetheless at a later point reveal itself catastrophic. The new variety may be found to have unforeseen weaknesses for its own survival or be toxic to those eating it for a lifetime, and once it has replaced the original strain devised by nature, irreparable damage may have been done, not only to one branch but to the tree of life as a whole. Life has always been in a delicate balance between earth and sky, and the tree of life itself stands because of an equilibrium between its various branches. Man is now like a young gardener apprentice, wielding a long and heavy sword around and attempting to trim the tree of life, with a very incomplete knowledge of its nature. His fate is nonetheless not set in stone. If he is wise, this weapon may be used to allow him to better resist the unceasing assaults of the earth and the sky. It may strengthen his world by tailoring life to serve his needs. He may also be foolish and cause not only the withering of entire branches of life but also cause his whole world to crumble. This newfound power may cause his world to attain new heights of civilization, but it may also bring his demise and even cause the death of life as a whole.

So powerful are man's tools, so deep is his appropriation of life, that he is finally confronted with the dilemma of whether or not he should make use of his power. Until then, he raced frantically against his brethren and against other parts of life to acquire the means necessary to increase his chances of survival and strengthen his domination of the earth, the sky, and the world he built between them, using all his might and all his intelligence. He enslaved the beasts of the open country and brought them into his world. He

imprisoned the plants so that they would turn the heavenly radiance into as much food and material as possible. But now, he rightfully begins to hesitate using his tools to their full extent, knowing that he may lose control of his creation, recognizing the fact that he remains largely ignorant of the long-term consequences of his actions.

Furthermore, as he is now able to steer the course of life as a whole, and even transform his own body, change what defines him as a human being, he is finally invited to ask himself the question of the destiny of his own branch of life. Life as a whole is a fire that burns and spreads itself as much as the earth and the sky allow. Like a flower that sprouts out of the earth, grows, reproduces, withers, and dies, it does not appear to have another goal than its own perpetuation and extension. Man, on the other hand, is endowed with the ability to choose his own path, to himself set the goal he wishes to attain. For many individual men, this goal will be momentary pleasure or the inflation of the ego. Others nonetheless think about the whole of mankind and the whole of life, with some of them wanting to plant new forests of life by scattering seeds on distant planets, sowing life across the cosmos, but thereby only continuing the work of any other branch: growth and reproduction. Here on earth, others may decide to explore the possibilities offered by technology to transform our kind, replacing the tools fabricated by our hands with new parts of our body, engineered by us and put at our disposal at birth, embedded in our flesh, part of ourselves.

Thanks to man's progress in his appropriation of life, he has created crops that can withstand the whims of the sky and withstand the blows of other branches of life more than ever before. The yield of his fields is far higher than it was a few generations ago. Food is more available than at any point in history, and large parts of the world no longer suffer from hunger and famine. Man is nonetheless hardly satisfied. He continues to frantically run to acquire more power over life, and over nature as a whole. One day, he may even be able to create entirely new trees of life, having few in common with the one to which we belong. He may fabricate living things like the tools coming out of factories, and replace the machines around us with precisely tailored forms of life. He may transform his own flesh to be able to survive in different worlds, on different planets, or even at the bottom of the oceans. Contemplating endless possibilities, and facing an almost infinite expanse to conquer in the skies, he may lose himself in them, and forget to reflect on the goal of his work of appropriation, and the goal of his existence.



So extensive and deep is man's knowledge of nature that few individuals have a comprehensive vision of their world. The most advanced techniques of subjugation of life are mastered only by a select few, working far away from our eyes in secluded laboratories, while we busy ourselves with other forms of labor, acting in other parts of the realm we all share. We may nonetheless unknowingly encounter the products of their toil, whose results are often invisible to the naked eye. They are grandmasters of life, able to braid the finest threads of the innermost essence of life, manipulating the long chains of grains of matter determining the way every living thing develops as it grows from a seed. Observing the plants around us, and even the creatures wandering through our world, we may perchance behold living things whose essence has been altered by human hands. Contemplating nature, we are no longer able to discern the limits of our world, as even the wildest landscapes of the open country may invisibly bear the traces of our work, the marks of our subjugation of the tree of life as a whole. The extent of our appropriation has blurred the line between life and world, between the natural and the artificial.

Wandering through a busy marketplace, our eyes may seek products of the appropriation of the essence of life, through the manipu-

lation of the long chains of the most minute grains of matter defining the growth and form of living things. Vegetables made significantly larger than those found in the past, apples whose flesh is not darkened by the air, or grapes deprived of seeds may be found thanks to our newfound knowledge of the innermost nature of life. We may notice that these living things bearing the traces of the intervention of our species can hardly be distinguished from their more traditional counterparts. Taking them to our mouth and tasting them, our palate is unable to detect the effect of the work of mankind upon these parts of life. Letting these recent products of our world replace the ancient fruits of the earth as our food, we may wonder if this choice may not be unwise. What do we know concerning the effect of the alterations we performed on these branches of the tree of life? It is even conceivable that we ourselves may secretly bear in our cells the indelible marks of the tools of mankind. Thinking of the impact of man's work of appropriation upon the giant cedar of life, whose branches encompass our world, we may stand in awe of the power acquired in our time by our fathers and brethren, honoring their tremendous efforts and ingenuity.

Frenziedly running the long race for the appropriation of life, we may nonetheless at some point be confronted to the question of the limits of our desire for supremacy over life. How much food do we need to be satiated? How crowded must the streets of our world be to satisfy our desire for domination of the earth and the sky? How large must the extent of our possessions be for us to be content? Let us picture in our mind the entire course of the growth of the tree of life, the long evolution of our bloodline, from the very first spark of life until the present generation, the myriad of creatures currently crawling upon the face of the earth. During most of the history of our planet, this tree grew naturally, guided from below by the earth and from above by the heavens. For a few millennia, an infinitely small fraction of the great history of life, the hands of man have guided the growth of certain of its boughs, as man chose which individual would reproduce and what bloodline would be brought to an early end. Only a few decades have passed since we discovered the tools allowing us to manipulate the long chain of the most minuscule grains of matter defining life, but we already left a deep imprint upon the majestic tree, transforming its innermost nature. Contemplating this incredibly fast-paced movement of appropriation, we may imagine the future appearance of our branch of life. We may wonder where we are headed if we continue to follow

this strange course our world has taken.

Chapter 3

Appropriating the Skies

The skies form the upper realm, what encompasses the earth, life, and the world, the blue dome adorned with the gilded sun flooding radiance over us by day, and the dark vault embroidered with scintillating stars, like a river of diamonds, surrounding the pale glow of the moon by night. They are nonetheless more. They represent the expanse wherein the earth can *be*, an expanse deployed according to both space and time, with the planet and all the things made from its substance, such as life and man's world, being taken along the way of the skies, the path taken by the all-encompassing heavens themselves as the celestial wheels endlessly continue their revolutions, setting the pace of the days, the months, and the years as they carry the earth and the heavenly luminaries.

The sky is nonetheless seldom noticed by the runner of the race for the appropriation of nature, as its ethereal nature renders it inherently more difficult to exploit. Man nonetheless desperately needs the celestial storehouse more than anything else found upon the earth, as he would not survive more than a minuscule fraction of a day without replenishing his chest with the air enfolding our planet, but the fact that the air offers itself to man without efforts makes him blind to its vital nature. The foundation upon which the life of all animals rests, the plants and algae using the brilliance of the sun to weave earth and air into new parts of life, equally depends on the benevolence of the heavens. Light and air are the two facets of the skies that can be exploited by man, once again seeing a realm of nature as a mass of resources to be used for the edification of his world and to get ahead of others in the race for the appropriation



of nature and the play of love and war guiding the growth of life. These would prove to be invaluable for the progress of the runners of the race, considerably improving the resilience of man as he faces the harshness of the earth, the aggressive treatment of life, and the wrath of the skies, but seeing the realm above as a set of things, he nonetheless grows more and more blind to its splendor, and to the other facets of this realm upon which his talents for appropriation are less efficient, such as space and time themselves, as he has yet to find a way to manipulate them.

When a man is tired of the race, seeing its end clearly and becoming uninterested by its rewards, he can then sit down upon the earth, folding his legs parallel to its face, with his torso pointing toward the magnificence found above, his eyes raised high over the horizon, feeling the slow turning of the gigantic heavenly wheels taking him across space and time, experiencing the work of the skies with his senses, contrasting the vision of the skies of the runner of the race with the one of the idle contemplator of the heavens, dazzled by the stark difference and yet appreciating their complementarity.

3.1 The Light

Light needs the transparent expanse opened up by the skies to shine in the eyes of man. It shares with it its ungraspable nature. Its warmth can be felt by our skin as it absorbs its rays, and it can be seen, but it cannot be seized or directly manipulated with the body that life has given us. It may come either from the sky, the light of the celestial bodies for example, or from the earth, like the glow of rivers of magma running out of volcanoes, or even from living things like fireflies, but no matter its source, it needs transparency, a clear path through space for its presence to be noticed. Its course is generally stopped by the earth and the bodies of living things, many of which have learned to make use of this precious resource bountifully poured over the earth from the realm above. Light is a wealth of the heavens, offered to the living and watering the tree of life, one that appears inexhaustible compared to the wealth of the earth or the one of life, which could far more easily be depleted, one that lets itself be effortlessly collected, no matter where we are on the earth, with the sun only denying its gift during its daily retreat under the horizon.

Ungraspable, light nonetheless allows man to instantly grasp the nature of his surroundings, as these minuscules rays offer him a detailed picture of the walls of things enclosing him, without the need of bringing these things to him, to be felt by his hands to know about their presence and nature. It is a source of enlightenment, one of the mind and the world, rather than a mere illumination of the earth. Exploiting this flow poured down from the sky, the runners of the race for the appropriation of nature gained much insight concerning the nature of the earth, life, and the skies themselves, bringing the most remote parts of the heavens and the smallest parts of the earth into their world, and further increasing their grip upon the whole of nature. Their attention focused upon what is shown by the light, those running the race thus seldom try to ponder the nature of light itself. It is those who have freed themselves from the race who are more likely to bathe themselves in light to get more acquainted with its nature, letting themselves be blinded by radiance, seeing only light rather than things, realizing that unrestrainedly flowing through man's pupils, light conceals as efficiently as it can reveal, eclipsing all things and leaving him as if he was plunged in the most absolute darkness, seeing that light would be useless and meaningless without its interplay with darkness, the empty expanse of the

heavens.

3.1.1 The Fire - Creating Light

The life of the first men was paced by the course of the great luminary, as its rising lifted the opaque veil covering their world each morning and its setting marked the time to return to their home, fearing the dangers lying in the shadows, blinded by the obscurity enshrouding the earth and thus powerless. The silvery glow of the small luminary passing through the night sky may at times soothe man's anxiety, and he may find comfort in the gentle twinkling of the stars, jewels sewn onto the dark, velvety cloak of the firmament, but eager is his heart for the glorious return of the gilded orb, the fountainhead of fire flooding the earth and life with its warm brilliance. Occasionally, he is intrigued by sources of radiance found over the earth, the volcanoes pouring out incandescent rivers of molten rock, or the fireflies shining over the grasses as they dance with the summer breeze, but none of these sources of light would profoundly change man's life. Another nonetheless would, one that is offered by the lower heavens and is well-known by every single human being: lightning. The anthracite clouds overflowing with water dispense more than the liquid of life as they pass through the sky, over our world. Thunder resounds through the air, alerting the living of the occurrence of a glorious phenomenon, a wondrous spectacle of nature displayed throughout the celestial vault. Lightning strikes the earth, and sometimes even men themselves, with a flash of light, a thin torrent of intense force that breaks the rocks, pierces the soil, or shatters the trunks of the most majestic trees. As this flow of fire poured down by the clouds passes through such trees, some of them will be ignited, enraptured by flames consuming their branches and their leaves. This fire quickly spreads to the nearby trees, and soon an entire forest is set ablaze. Contemplating such fire with fear and awe, man discovers that life itself may become a source of brilliance, one as bright as the sun, bestowing even more warmth than the heavenly orb, one that contrary to the celestial luminaries can be approached and appropriated.

The appropriation of fire by mankind has already been examined in its earthly dimension,¹ that is, as heat, and now it is its

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See: Part III, Ch. 1.



heavenly dimension, as a source of light, that will be the subject of the following pages. Intrigued by the fires ignited from the sky through lightning, man soon learns how close he can get to them to benefit from their radiance without seeing his skin be damaged. He beholds his world illuminated throughout the night by these flames. It appears as if the sun itself had planted incandescent seeds sprouting out of the earth to form a new sun, one that inhabits the face of the earth and consumes the great body of life for its sustenance. The bright reconquers the darkness of the night thanks to this reassuring and luminous presence, and man recognizes fire as a new ally, chasing away the fears brought on by the reign of the dark over the earth, curing the blindness affecting him each day, soon after the retreat of the brilliant sphere beyond the horizon. He therefore begins to care for this new friend of his branch of life, feeding it with new parts of life when it has consumed all the living things found around it, when the flames have disappeared and the glow of the embers is growing faint. Befriending fire, he carries it on the earth and invites it into his home, first as a guest, but one that soon becomes part of the household.

The hearth then becomes the center of man's home. It floods it with light, becoming a sun around which the living congregate when the great luminary is nowhere to be seen. Those around it are no longer condemned to take refuge in the solace of sleep, escaping the darkness of the earth to venture into the world of dreams, which is illusory but as bright as the day. They can see each other, prepare food, watch out for intruders, or work on the fashioning of new tools or weapons. Their day no longer irremediably ends at dusk, and

it no longer begins at sunrise. Man gains a larger control over his time, as he appropriates the sky by possessing fire. His reliance upon the gleaming star is reduced, as he becomes a master of the flames, a lord of the bright, deciding by himself when the darkness will be allowed to reign upon his dominion, when his flesh cries out for sleep, when his body needs the dark to heal, to rest, and so that we may slip into the land of dreams. Life acquires a new power over nature, as it weakens the relevance of the alternation of day and night, the reign of the bright sky and the one of the dark earth, but man also becomes a closer ally of the bright realm above the earth, as he brings radiance into the darkness, light into the heart of the night. He wields light as a weapon against darkness. He uses the strength of the skies to assert his domination of the earth, but he thereby also finds himself used by the upper realm, doing its work, extending the territory that it occupies.

The appropriation of fire then continues, with man learning how to kindle a fire by himself, without waiting for it to be effortlessly offered to him by the somber clouds of the lower skies in the form of lightning. Wielding earth and life as tools, using pieces of iron and flint to kindle sparks and feeding them dry wood, men thus began to produce light, or more exactly to release the energy concealed inside the remnants of living things, such as pieces of wood, as radiance, shining through the sky and slipping into the eyes of men, illuminating their world and their minds. Kindled at will, with only rudimentary tools and some practice, fire occupies an increasingly greater place in man's world. It also radically changes the way man looks at the rest of nature, the trees in particular. The majestic pillars of life are indeed now seen as colossal reserves of warmth and light, as they are what the flames crave, what sustains the presence of fire. Allied with this force of the sky, he makes enemies within life itself, sacrificing the wooden bodies of the trees that fed his distant ancestors with their fruits as they dwelt in their branches, to allow fire to continue to spread through the earth and the sky, space and time. He sees forests as food for his second sun, burning here on earth, close to him. The woodlands to his eyes become vast vaults of light waiting to be opened, so that their luminous wealth may flood his living space and become a substitute for the daystar.

Appropriating light, wielding it as a tool, man can then explore new parts of the earth, the secluded locations into which the brightness of our star cannot penetrate. The depth of the caves dug by the work of time in the face of cliffs and mountains can now be revealed



and invaded, as he carries an inflamed torch or a lamp in his hand. He can mine the riches of the earth, carrying flames into deep shafts created with the strength of his arms and seeing their light point out the presence of nuggets of gold, silver powder, diamonds, or rubies. Wielding the strength of the skies, he brings light to the heart of the earth and all these illuminated regions become part of his world.

The appropriation of fire thus extends man's world, through space as well as through time. He can indeed now edify his world during the darkest hours of the night, a time when he was condemned to introspection or idleness as he laid in the obscurity of his home or simply enjoyed the faint glow of the moon and the stars. Light shows him the darkest corners of the earth, the most inaccessible places he can reach. Feeling empowered by his knowledge, his mastery of nature, his capacity to use the earth, life, and the sky as tools to help him fulfill his every desire, he begins to forget what he owes to the glowing sphere of gold that waters the tree of life with radiance during the day. Able to kindle miniature suns burning upon the earth, the awe he felt beholding the fiery orb begins to wane, and he no longer craves the glorious rising of the star marking the beginning of the day. He loses himself more and more in his world, as he appropriates larger parts of the earth, life, and the skies, grasping the universe with his mind, confident of the extent of his power over nature. The more light is shed within his world, the more radiant is his dominion, the darker the shadows that are cast beyond the horizon of this world. The certainty of his own illumination blinds him to the truth that lies beyond the frontiers of his world. He can nonetheless choose where to place his lamp. He can search for the



blind spots of his world, the darkest corners in need of light.

Unsurprisingly, children like to play with fire. This mysterious phenomenon indeed catches the attention of the curious minds, and the undulating flames offer an enchanting display of continuously changing hues accompanied by waves of warmth, as the young spirits behold former parts of life being consumed by it, reduced to ashes. The appreciation of the luminous gift of fire, first offered to us by the heavens themselves through lightning, nonetheless demands that we first be plunged into darkness, separated from light, and especially the one showered upon the earth by the fountainhead of brilliance circling the celestial vault. Entering the innermost chamber of our home, shutting ourselves inside a windowless room, we may now allow ourselves to be gently approached by the dark, be delicately touched by the shadows banished from the face of the earth during the day and from our homes when we light up a lamp or a fireplace. Opening wide our eyes, we see nothing, or rather see one thing: the darkness itself, the absence of light. Such an encounter invites us to introspection, as we are no longer distracted by the profusion of things hoarded inside our world. When the torrent poured by our senses into our mind dwindles to mere droplets, our attention has nowhere to focus but on ourselves. This ephemeral blindness reveals our nature, allowing us to suddenly see what was concealed by the heavenly orb of fire, forcing us to anxiously face the formless void lying beyond the rectilinear boundaries of our world.

Immersed in absolute darkness, clad in a cloak of the obscurest

shadows, we begin to crave light, to yearn for an illumination of our pupils and our hearts. Using one of the tools of our world, offered to us by our ancestors, we now kindle a small flame, light up a fire separating us from the obscurity reigning in this room. A faint spark grows into an elongated flame, like an explosion of light, shooting luminous shrapnel in every direction, spraying radiance all over the walls and the floor, covering us with the finest stardust. The shadows then vanish into thin air, and the obscurity gives way to clarity. The world, our world, reappears, as a great multitude of wobbly grains of light bounce all over the room to finish their course deep inside our eyes, triggering a deluge of signals in our nerves, as our mind is once again flooded with a torrent of representations of the things forming our world. We are now the witnesses of a manifestation of the power of fire. Let us see the incomparable might of the sun captured in this fickle flame kindled by our hands, offered to us by our predecessors. We become aware of what it shows us, how it brings the entirety of what lies in front of our eyes to our minds. If we can walk out of this room without colliding with any thing in our way, it is because of this power. So familiar have we grown to the presence of fire that its wondrous nature has become almost invisible to us, but we may attempt to once again feel the joy that came when the first men, after long, tiresome efforts, saw their hands giving birth to flames for the very first time, durably breaking the yoke of the darkness that held sway over their home during the night.

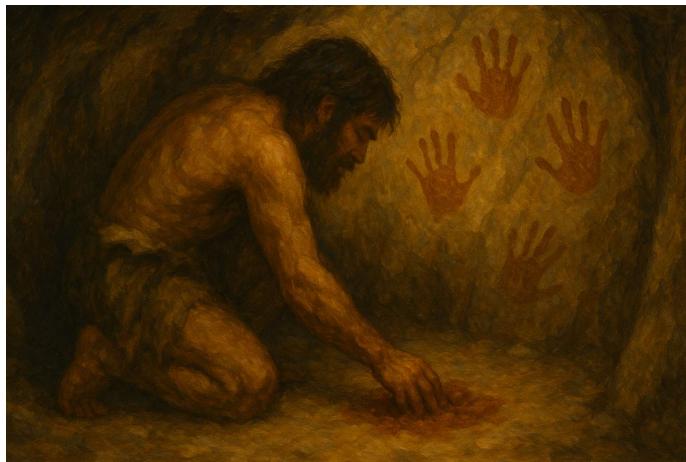
Releasing the light concealed within matter, unlocking the vaults of the earth or life, we may nonetheless notice how faint is this glow compared to the one of the blazing orb adorning the firmament. Our appropriation of fire gives us power over the night, but it does not lessen the reliance of life as a whole on the benevolence of our star. The tree of life stands because of its generous downpours of light, and despite all our knowledge and our skills, we are unable to release the strength imprisoned within the earth, within matter, as efficiently as the great luminary does. The food upon which we rely for our survival is grown by it, while our fires usually only destroy the labor of the light-workers exploiting the luminous envoys of the generous star, unraveling the bonds they painstakingly woven, consuming them until they are nothing but ashes scattered by the winds. We are now thankful to our forefathers for the gift of fire, soothing the anguishes of the night and extending the reach of our world, but also feel humbled by the superiority of the gilded jewel shining over us each day of our lives. May the flames we kindle be

seen as an homage to the great fire that waters the tree of life with radiance, rather than a sign of knavish defiance and ingratitude.

3.1.2 The Pigment - Shaping Light

Light reveals the myriad of things present in our world. Each day, life is engulfed in a monumental torrent of brightness flowing down from the sky, flooding the earth and penetrating the surface of the oceans to illuminate the deep. Man is like a fish swimming in a sea of light, and this familiarity causes him to seldom look at light itself. All that he sees is light, but he does not notice its nature. What he perceives is the things touched by this flow of brilliance, images painted upon his retina, and he thus looks at the things but is blind to the nature of the luminous brush painting these representations. He already knows how to fashion objects made of earth with his hands, but the images of these things painted with light on the canvas of his eyes show something more than the work of his hands. These images are painted with a wide array of colors, belonging to the earthly material from which they are made, and he exerts little control over this appearance. These colors cannot be touched by the hands or tasted with the tongue. They are only perceived by the eyes, and represent ways by which light is absorbed or reflected by these parts of the earth. Colors are the result of an encounter between white light flowing in the sky and the earth, the lower realm obstinately refusing entry to the beaming envoys and repulses them back to the heavens. The white clouds hovering over the land reject the brightness of the sun and thus appear almost as luminous as the star. The dusty soil covering the earth on the other hand captures this brilliance, and thus appears as dark as the night. Unaware of the subtleties of the nature of the luminescent flow, the first men nonetheless soon realize that they can appropriate the appearance of the things of their world.

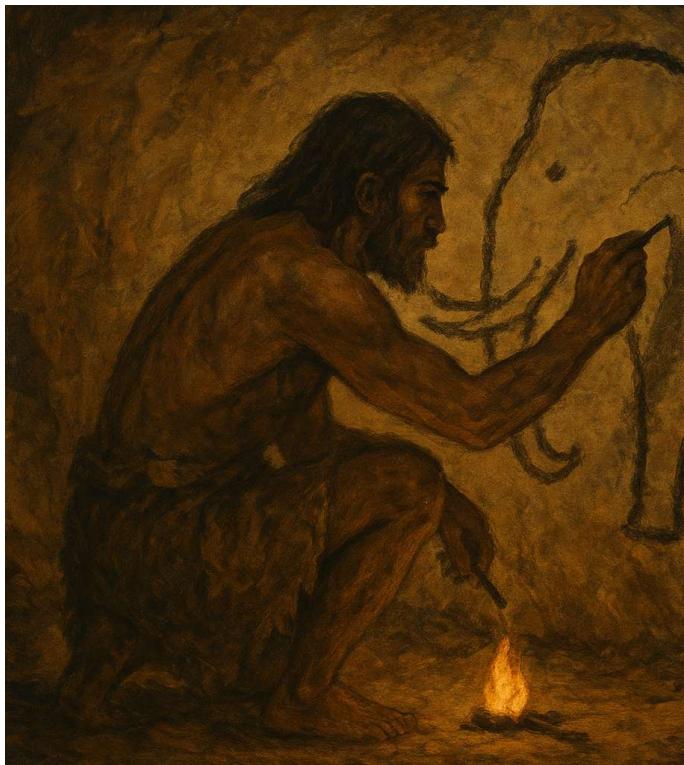
After touching pieces of charcoal on the edge of the hearth, man discovers that his hands now bear the traces of these remnants of life consumed by the flames. His skin is darkened, and intrigued by this, he takes one of these pieces and begins to rub it against his arms and against the stones marking the boundaries of his fire. He can now turn white into black, darken what is bright, changing the way light interacts with the things onto which he applies this wood which was robbed of its colors by the blaze. He begins to realize that he can do more than shape the form of earthly things. He can use



substances like this piece of charcoal as pigments to play with the light flowing between earth and sky and change their appearance, the way they reflect or absorb the luminescent flux filling up the air.

Wielding earth as a tool, man thus appropriates light, directing the torrent of brilliance enfolding his world so that it would carry images painted by his hands to the eyes of its inhabitants. The earth is once again explored to discover new pigments, enlarging the palette with which he paints the things of his world. Ochre soon becomes a prominent substance for this purpose. The reddish hue of this powder found in the ground is the same as the one of the blood of man and other beasts of the dry land, and this is no coincidence, as this color comes from the same substance, the one forming a large part of the core of the earth and that also flows within our veins: iron. Blocks of chalk represent a more evanescent but nonetheless useful addition to this palette, allowing dark stones to be adorned with traces as white as snow. Equipped with such a selection of colors, man begins to experiment, to explore the possibilities offered by this appropriation of the flow of light running over the earth, enshrouding life.

Covering himself with charcoal dust or ochre, man sees his brethren looking at him differently. Painting the skin of others with these pigments, he can see their human appearance being transformed, blurred. They can be made to appear like ferocious beasts, inhuman, and strike fear in the eye of those looking at them. The pigment then becomes a weapon of war, a tool of seduction. It can influence the play of love and war, the axle of his existence. The mastery of light thus becomes invaluable, with radiance wielded as



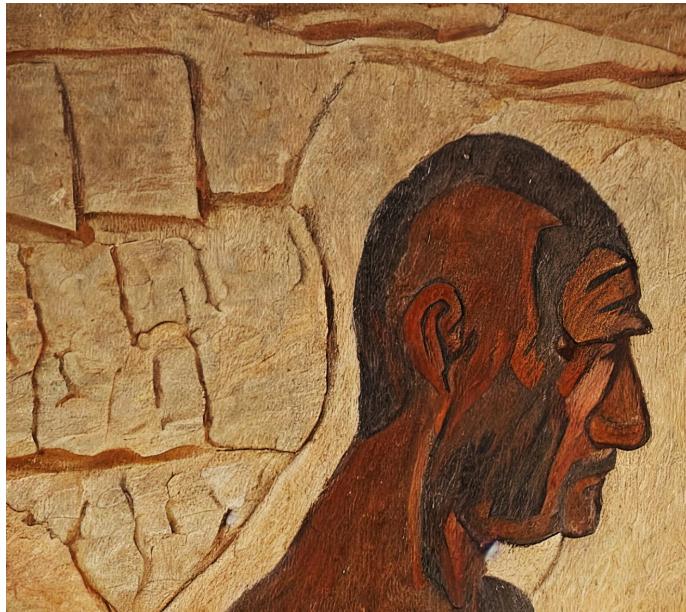
a tool that can change the course of a man's life, determining his life or death, or his success in finding love and father an offspring. Painted with charcoal dust during the night, man allies himself with the dark and can stealthily advance to surprise his enemies, as he captures all the envoys of the fires kindled to alert the guards, not letting them be reflected and give notice of his presence. With skillfully drawn patterns of crimson paste covering his body, he appears more impressive, more unique than his peers, attracting the attention of potential lovers. Making light serve his purpose, he gains an advantage over those who have not appropriated the flow of radiance, and thus prospers among his kind.

Man nonetheless soon realizes that his work of appropriation of nature once again comes late, long after life itself, which preceded him. He indeed sees how life meticulously refined the appearance of all living things so that it would improve their success in the play of love and war. Some birds are endowed with brightly colored feathers allowing them to stand out from the emerald sea of leaves of the forest and impress a mate, while others are offered a coat of the same color as their habitat, allowing them to blend in and not be noticed

by those seeking to feast on their flesh. Some fruits are painted with the color of blood so that they would be eaten and so that the seeds they carry would be scattered across the land, ensuring the sprouting of new trees, while some mushrooms are clothed with a crimson cloak to evoke fear in the eyes of the animals that may want to eat them. Life thus is already a grand master of light when man discovers the first pigment. He nevertheless learns from life itself, imitating its work, patiently unveiling new uses for these substances.

Surfaces like skin or the walls of a cave then become canvases, blank expanses where pigment can be applied, offering a contrast that mirrors the one between earth and sky, matter and space. Wielding a piece of coal, a tube filled with an ochre paste, or any of the myriad of colors found in the ground or in the body of living things, man thus becomes a creator, a painter. He can marry pigment and light, earth and sky, to produce images that will strike the imagination of others and become part of their world. The canvas is the vast emptiness of the sky, offering a space where things can *be*, occupying it. The pigment is the materiality, the substance of the earth, what exists inside this space, what offers a contrast with emptiness. Reigning supreme over this expanse, this universe, the painter is a god-like figure, hovering over this space and creating new things inside it with small movements of his arms and fingers.

Having yet to develop the sensibility and the spirit of an experienced artist, the first painters thus began to appropriate this new medium with their bodies, simply leaving the imprint of their hands on the walls by spraying ochre around them. They attempt to imitate, to represent what they saw in their world using pigments, but the focus of their attention appears to not have been the things of the earth or those of the skies, but rather the beasts that roamed their land, and upon which they relied for their sustenance. Their palette of pigments began to be used for something more than to change the color of the things of their world. They began to use them to represent, to refer to things that are not there, invoking their presence. Drawing the contour of a deer with charcoal, filling this silhouette with shades of crimson ochre, man does more than change the color of the walls, shape the flow of light entering into contact with it. He now creates images representing something only understood by man, something only present in his world, even though the image itself is made of charcoal on a canvas of stone, both parts of the earth. The appropriation of such representations nonetheless ceases to be a mere appropriation of light, but rather more an appropriation of



the world, and it will thus be examined at a later point.²

In parallel with the development of the use of pigments to edify the world with images and signs, man nonetheless continued to explore their use for more simple purposes. Crushing various types of stones into powder or extracting the essence of fruits and plants to create new, vivid pigments reflecting the beauty of the earth and the sky, man later began to paint the walls of his house, dye his clothes, and indelibly paint his skin with needles dipped into colorful liquids. Appropriating light through the use of these substances, his world is now painted with colors of his choosing rather than by those of nature, those of the earth, life, and the sky. The reach of the work of his hands has been extended to the color of things, in addition to their shape, and the world of man then continues to grow increasingly alienated from nature, as the very essence of the earthly material with which countless parts of this world are made become increasingly concealed. Wooden houses are now covered with paint, hiding the natural origin of this material, offered to us by life itself. Iron beams are also covered with colored pastes whose source is unidentifiable by most men, veiling their earthly origin. These paints, these pigments, bring joy to our hearts and fill us with feel-

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See: Part IV.

ings of beauty. They coat the things of our world and protect them from the work of the skies as they embellish them, but man should nonetheless remain aware of the increasingly large gap that separates his world from the rest of the earth, life, and the skies, leading him to become blind to the truth of nature, to the essence of this earth upon which he was born, and with which his world and his own body are made.

No matter whether it comes from the great celestial luminary, a fire fed with the living pillars of life forming our forests, or the flickering flame of a candle, light offers us a vision of the earth, life, and the skies, painted with a multitude of hues, embellishing our world as it teaches us about its nature. If we venture into the open country and take a look at the landscapes it offers, we may see how wide is the palette wherewith the earth, life, and the skies are painted. The azure sky encompasses all, while cottony white clouds calmly pass over our land. The grasses form an emerald carpet covering the clayey soil, while the bark of the trees is like finely chiseled amber. The sun is a sphere forged with the purest gold. The moon is polished silver, and the stars are diamond dust sprinkled over the celestial vault. As we behold the magnificence of nature, we may notice the source of brilliance that offers us this marvelous sight erasing the dread buried in the depths of our hearts. Let us feel the flow of light reverberated upon every single one of these things we see as it penetrates our pupils and strikes our retinas, and let us appreciate the myriads of colors offered to us by life itself to contemplate, considering what they evoke in our mind, the web of memories and knowledge linked with this ballet of patterns and hues.

Having delved into awe-inspiring visions of nature, we then observe the world we inhabit, the villages and cities where most things bear the marks of the hands of our species. Looking at the inside of our home, we may wonder: how does this sight compare to the landscape that nature offered us to behold beyond the frontiers of our world? The spectacle of the earth, life, and the sky is complex and yet perfectly harmonious, and in contrast with it, our home offers images of simple shapes assembled with one another, right angles forming corners everywhere, and polished surfaces coated with paint, plastics mixed with pigments, or dyed fabrics. The flow of light passing through our windows or poured out of our lamps shows us the

same colors as those we saw in the open country, but here, these tints have been chosen by men. They are the product of an investigation of the earth, the blending of different substances to create a specific shade, then applied upon the surface of things made by their hands. The color of these things no longer tells us much about their nature. From what parts of the earth or life are these colors in front of us made? Few would be apt to answer. But what do these tints tell us then? We may muse on the meaning that these paints, dyes, and pigments covering the things around us have in our world. Why do we associate white with cleanliness, and thus use this color in our bathroom, a place that is often soiled by our wastes? What is the reason explaining the link between black and sobriety or the absence of emotion? What do our choices of colors for our home and our clothes tell about us? We may then realize the depths of the impact of the appropriation of pigments by our fathers, and see how by very slightly affecting the flow of radiance running between earth and sky we can profoundly alter our world.

The pigments covering the objects of our world render them more pleasing to the eyes of its dwellers. They are comforted by the uniformity of their surfaces, demonstrating control and exhibiting a certain neatness. Observing these surfaces, we notice how pristine they appear, with homogeneous tints whose boundaries were precisely determined. Looking at these man-made objects, we nonetheless are aware of the fact that they are all made with the same earth as the one upon which the meadows flourish and the tree of the woodlands grow, and upon which the foundation of our world is built. These pigments indelibly mark these objects as belonging to our world rather than to the unadulterated earth, but this thin coating is only a mirage, a veil enshrouding the world to conceal its origin, leading us to believe we are the source of all the things around us. We now attempt to see through these layers of paint, to pierce with our glance the colorful coats of pigments preventing us from seeing the nature of these things. We see the wood beyond the varnish, the iron ore beyond the protective paint, the sooty, liquefied remains of past forests behind the flashy plastic shells. Then, the true place of the pigment in our world is finally revealed to us, and it can then be unhurriedly contemplated.

3.1.3 The Mirror - The Self in Light

Life forms a whole. It is a fire, a phenomenon rather than a substance, one that takes hold of earth, air, and light and extends itself to the confines of the earth and into the depths of time, work of the skies. Life is also a multitude of individual living things, roaming the dry land, swimming in the seas, or flying through the heavens. The independence of the parts gives an incredible resilience to the whole, and allows the tree of life to form numerous branches, each exploring a unique path. As the nature of some of these individuals grew in complexity and intelligence, self-awareness emerged among the living. Sensing the world around them, they begin to perceive the contrast between themselves and the rest of this world. They can feel the boundaries of their flesh, the frontier between the self and the other, and thus learn to defend themselves, actively resisting the quenching of the fire burning within them, the return to the earth of this mass bewitched by this miraculous phenomenon.

Among all the senses conferred to the animals inhabiting the earth, vision nonetheless occupies a peculiar place for the fostering of self-awareness. The cascade of light poured down from the sky indeed allows living things to, at a glance, grasp vast expanses with their mind, as if each grain of light represented a finger with which they could feel the things around them, no matter how distant or inaccessible. The eye allows the instantaneous contemplation of the whole, to embrace a totality unseizable with other senses. Bathed in brilliance, man can see the lower parts of his body. He can observe these hands with which he elevates his world, his chest filled with the air of the heavens, his belly with which he breaks down the remains of other living things to feed the fire burning within him, the organ with which he kindles new sparks of life, and the legs with which he explores the face of the earth. What appears to be the most essential part of his body, the seat of his self and the one without which his conscience would immediately be extinguished, is nonetheless impossible to see. He sees the faces of other men and can infer that he also must look like them, but he recognizes that each one of them is unique and that their face partly defines their identity, how they are treated by others, but he ignores his own appearance. Stooping over the surface of a puddle or a lake, left undisturbed by the winds, he may finally glance at a fleeting image of his own face, revealing part of his own nature. This first sight of one's face certainly is a crucial moment in a man's life, even though



few will remember it, as it occurs too early in their life to indelibly mark their memory. Man can then realize that he is but one man among many others. He is not the center of the world, the reference from which all things are seen, as every other man is just like him, and they all see him as he sees them.

Encounters with a perfectly reflective surface are nonetheless rare in nature, and the images they give are transient, fleeting. Exploring the earth to find raw materials with which he could build things, man still encountered a substance that broke into long shards that were both sharp and shiny: obsidian, volcanic glass. Created by the fiery blood of the earth itself, the dark blocks could be polished to form black mirrors, offering reflected images more precise than those observed in water, and more importantly, these images were constant, undisturbed by the movements of the things around them, and the mirrors could be easily carried around the earth. The first mirrors built by the hand of man thus offer him the ability to observe the details of his face, his head, and his eyes. He finally discovers the seat of his conscience, seeing himself as an object rather than a subject, seeing himself as other parts of life see him. Furthermore, he not only sees himself in isolation, but rather as part of his world, as a dweller of the earth, encompassed by the skies, and can see himself as part of this whole formed by his world.

The mirror represents a new way by which man appropriates light. Polishing a part of the earth, obsidian, copper, or silver, he fashions a perfectly plane surface. He creates an earthly rampart that repels any attempt at an intrusion by the envoys of the sun. Light bounces on it like a vast array of projectiles, and many of

these bits of radiance end their course in the eyes of those standing in front of this mysterious thing, product of man's hands, forming an image, showing what one would see if standing at the place of this mirror. Besides the revelation of the self, this object also teaches man important lessons concerning the nature of light and of his sense of vision. The image of himself shows him the difference between the image and the thing that it shows. He realizes that what he sees in the mirror is only an illusion of presence, a representation painted with light of something that is away from it. He sees himself standing but knows that what he sees is a mere image and that he has not escaped his own flesh to behold it from afar. A realization comes to him: he can no longer trust his eyes, as he may be deceived by his sight, and must therefore use his intelligence to grasp the nature of what he sees.

Becoming familiar with the difference between the image and the things it shows, man can then play with these images. Crafting mirrors with surfaces curved in different manners, he can see in them strange representations of his world and himself, images that he knows do not faithfully reflect the nature of these things. Behind the comical effect of these strange images lies a jewel of knowledge of the world, inviting him to reflect on the reality of all the things that he sees, not only in the mirrors but the world as a whole. He is once more taught about the nature of the earth and the sky, as he witnesses the stability and materiality of earthly things like the mirror, and sees the ethereal nature of the heavenly things, like the images painted with the radiance of the sun. Light cannot be touched, smelled, or tasted. It belongs to the skies and is always inconstant, transient, and the torrent of radiance running between earth and sky is at all times shaped by the things of our world, often offering distorted images of the things present in it.

What for a long time remained a luxury item possessed by the wealthy then slowly found its place within the homes of most men. By showing all men their own image, the invention of mirrors led to an increase in their attention to their appearance. Man can now see what image he gives of himself, not only by the features bestowed to him by life itself but also by the way he cuts his hair or by the way he dresses. The beautiful takes pleasure in looking at his own reflection on this polished surface repulsing all light, while the ugly beholds his countenance in despair, filled with bitterness. This act becomes a temptation for narcissists and a trial for those lacking confidence in themselves. Man now compares his facial features to those of

other men. Inharmonious shapes now stand out, and he becomes overly conscious of his imperfection. A crooked nose, baldness, or excessively large ears often become an obsession, leading him to frequently face his own image to try to find beauty in it, and to pass judgment upon his aesthetic value.

All men are then more mindful of their appearance. Egos occupy a more central place in man's world, as each departure from the home is preceded by an encounter with a mirror, with man verifying that his image would not be unpleasant to behold by others. Appropriating light to finally see himself, manipulating a flow of light like a tool, man thus appropriates part of his own nature. By grasping his own image with his eyes, he nonetheless becomes possessed by it. Many become slaves to this image reflected by the mirror, spending their lives trying to improve it, to make it more beautiful. Man lets himself be appropriated by the light, letting it determine his worth in the eyes of the world, forgetting the truth of being, losing himself in illusory images. Wanting to subjugate a celestial force, light, man thus led some individuals to be weakened and enslaved by it. Nevertheless, nothing is set in stone, and those who lose themselves in the images offered by the mirrors may at any time discover the truth hidden in them, their illusory nature, the fact that it is their mind, their world, that gives meaning and worth to these images, and that this world can be transformed by their hands.

The wonders of nature are rarely lustrous, like well-polished silverware or many-faceted diamonds. They welcome light, scattering it in a disorderly manner or letting it penetrate them, rather than reject it directly. Walking through the wilderness, virgin of the touch of man, seldom will we encounter a surface offering us a faithful image of ourselves, unless we are sufficiently wise to see our own nature in the whole formed by the earth, life, and the skies. Contrary to the open country, the world built by the hands of man is replete with glossy panels reflecting clearly the radiance of the heavens and the one of our lamps. We are constantly assailed with images of ourselves, so much that we forget that many of our forebears seldom or never saw their own faces with such details, such clarity as the one we now enjoy. Looking at these glossy surfaces, we observe the way they play with the rivers of light running down from the sky or the luminous geysers sprouting from our luminaries. We observe the contrast they offer with the matte objects found around us, musing

on the different nature of the image they offer us. We see them both because they reflect light, but the glossy surface offers us something more than a vision of itself: it shows us the world seen from its point of view, as if it had eyes and described in every detail what it saw. Contemplating these images, we may ask ourselves how does the image they give us of the world differ from others?

Within the walls of our home, a particular kind of lustrous surface can surely be found, one whose very purpose is to offer us a perfect image of what stands in front of it, our body in particular: mirrors. Let us first remember where are the mirrors found in this living space. There is certainly one in our washroom, and often another near our wardrobe. Looking at ourselves, at the vivid image reflected in one of these pristine surfaces, we may notice how familiar our face appears to us. This acquaintance is nonetheless purely the result of the possession of such mirrors, inventions of our distant fathers who discovered ways to appropriate the torrents of light in which we are engulfed for most of the day. Without this work of appropriation of the content of the skies, we would remain strangers to ourselves, and would not recognize our own countenance. This face we see has always been ours, but only when it was seen, like in this shiny object, did we truly appropriate it. Such appropriation is indeed more than mere possession. It is also a familiarity, a discernment, and we may now express our deepest gratitude to those who offered us the possibility to know this part of our own nature.

Alternatively looking at the mirror itself and at the image of ourselves in it, let us consider the place it occupies in our life, and in our world. It is likely that we use it to ensure that our appearance conforms to the image we want to project in others' eyes. We make sure that we appear clean, well-groomed, elegant, or beautiful, because we feel compelled to see our worth in other people's reactions when their gaze sweeps our body. This tool manipulating light can profoundly affect our mood, and thus it holds a considerable power over our lives. We may either feel emboldened or humiliated by the images it shows us. How much time have we devoted to their contemplation in our life? We may perhaps wonder if what it gives us may not exceed what it takes away from us, and whether or not we use it adequately, to better know ourselves rather than to merely puff up our ego.

3.1.4 The Lens - Guiding Light

The earth, the ground under our feet and the foundation of our world, represents what is hard, stable, and impenetrable. It resists the intrusions of man's hands and tools, and it even repulses the winds sweeping its face and chases away the envoys of the sun striking its rocky coat. There nonetheless are some exceptions. The liquid of life covering most of the planet wholeheartedly welcomes the downpour of radiance coming down from the sky. Water lets itself be pervaded with light, showing that it shares more with the air of the heavens than its fluid, ungraspable nature. The surface of the waters acts as both a mirror and a window, reflecting part of the light it receives but also letting some of it through, illuminating its depths. As the breeze caresses this surface separating air from water, sky from earth, the image that man sees is continuously deformed, making the things in the image seem larger or smaller than there are. Observing the interplay of light and water, man since the emergence of his branch of the tree of life had the occasion to see the power that water can exert upon the celestial flow of light, changing man's perception of the things seen on its surface. More subtle displays would nonetheless offer a clearer view of the way light can be shaped by translucent parts of the earth such as water.

Observing a drop of water, man may see in it an image of the world behind it. The spherical surface of the drop shapes the flow of light running through it, and the image it offers exhibits some intriguing peculiarities. Moving to and fro from the drop, he sees that some previously invisible details of the surface upon which this droplet is placed are now revealed to him in the image it offers. Scattering the flow of light, the curved surface appears to enlarge what is found behind it. Simply amused by this property of water, and unable to envision any use for it, man would for a long time ignore this hint of a future invention offered by nature. Even before life first set foot on the dry land, it nonetheless already had pierced the secret of the bending of a flow of light. The very eyes with which we contemplate the world indeed contain a translucent, curved disk whose purpose is to focus light on our retina, and investigators of life certainly at an early point of our history were aware of the nature and function of such a tool of life, present in many branches of the tree that it forms. Men also knew parts of the earth exhibiting the transparent nature of water but staying as rigid as rocks: crystals. Cutting and polishing them with great efforts,



forming spheres probably for purely aesthetic purposes, man then discovered that he devised a tool that could offer an enlarged image of things placed under it. The minute details of a leaf could now be discerned by his eyes, and the bodies of the most minuscule insects could now be attentively observed. Unfortunately, the rarity of such large crystals, difficult to cut precisely and often exhibiting defects or an insufficient level of transparency, caused such tools to remain mere curiosities, until a more convenient material was discovered.

The crushed remains of marine creatures of past eons forming the sand adorning the coasts, the meeting points of the dry land and the sea, thrown into the blazing furnaces that normally pour out rivers of molten metals, produce a new material, one that when polished possesses the transparency of the purest water and the hardness of a crystal, one that can be produced in great quantities and shaped with tools made of metal or stone, or even with air. Glass is probably first used to replace clay to create cups, plates, and bottles, delighting the eyes of the wealthy who marvel at the beauty of the rivers of light passing through these translucent vessels. Looking through the bottom of these vessels, men nonetheless rediscover the properties of curved, transparent surfaces. An empty cup placed over a manuscript enlarges the letters seen through it.³

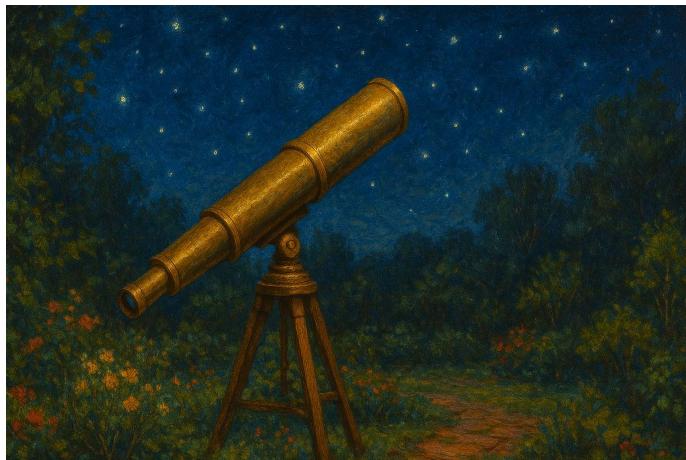
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The use of glass to enlarge an image of an object had already been described during the Antiquity by Seneca: “Letters, however small and dim, are comparatively large and distinct when seen through a glass globe filled with water.” From: Lucius Annaeus Seneca, *Delphi Complete Works of Seneca the Younger*, 1st edition (Delphi Classics, 2014), n.p. (§6.3).

Now endowed with a desire to systematically explore the nature of the earth and the sky, to unlock all the secrets of nature, man then begins a thorough investigation of the properties of this material. Glass disks are specially made for these experiments, with different shapes, different curvatures, and different sizes. The vessels become lenses, and a new dimension of the earth, life, and the skies is suddenly revealed through this invention.

The men whose vision has been impaired by the work of time can once again read the writings of their fathers and brethren, using a magnifying glass or corrective lenses. Man then soon discovers that lenses can be combined together to shape a flow of light more precisely and more extensively. This flow can be scattered to be made extremely wide and then its center part can once again be concentrated and focused to slip into our eyes, thereby providing an extremely magnified vision of a small part of our world. Man thus appropriates the flow of light pervading the earth in a new manner, using it as a tool to improve his vision, his capacity to bring the things of the earth, life, and the skies to his mind. Using finely crafted assemblies of lenses, he can spread a flow of light to delve into the minuscule as well as the incredibly large and distant. He can transcend the limits of his vision using these disks of polished glass, using them to uncover new aspects of nature, seeing it with considerably more detail. Glass then becomes more valuable than precious stones to appropriate the earth, life, and the skies. The magnificent diversity of the grains of sand on the beaches or the snowflakes falling down the heavens can be contemplated in their full glory. New branches of life are discovered, the minute lifeforms inconspicuously living on our skin, in the air, and in every corner of our world, such as bacteria, whose very existence was until then unknown to our kind. Pointed at the night sky, new instruments based on assemblies of lenses allow the observation of the finest details of the moon. They reveal new aspects of the planets circling around the horizon, and man can now admire marvels of the cosmos such as the rings of Saturn or the stormy eye of Jupiter. Progressing in his appropriation of light, man increases his knowledge of the things around him, which are then brought into his world, becoming his possession. Microbes and cells, galaxies and planets thus become new things of man's world, a world that absorbs more and more of nature.

The newfound knowledge of the earth, life, and the skies acquired through the appropriation of light begins to change some of



the foundation stones of his world. Myths are dispelled, and mysteries revealed, as the observation of the intricacy of the machinery of nature gives man understanding. The boundary between the three realms of nature begins to be blurred, as man discovers to what extent these are interlaced with one another. He can now see the machinery of life in great detail, and finally see its earthly nature, recognizing that it is a phenomenon rather than a substance, a way the earth is bewitched rather than something fundamentally different from the rest of the rocky planet upon which he stands. Studying the features of the celestial bodies, he comes to understand the similarity between them and the earth. The minuscule meets the gigantic, and man reaches out to these extremes with his eyes, bringing the depths of the earth and those of the skies together in his world, allowing him to tighten his grip over nature as a whole. Harvesting light like a wheat field, he uses it to learn how to better exploit the three realms for his benefit, for the furthering of the edification of his world, and the satisfaction of his desires. Some are nonetheless humbled by the vision of the extent of the skies, the sophistication of life, and the perfection of the earth. The more they understand, the less confident they feel about the extent of their understanding. The clearer they see, the cloudier their mind, and they stand back from their instrument, their tool of appropriation of nature, knowing what is enough.

Caught in the cascade of brilliance springing out of the incandescent jewel of the heavens every day we spend on this earth, and engulfed in the glimmer of our lamps when its face is veiled and

we obstinately refuse to succumb to the alluring call of the world of dreams, we may forget the precious nature of this unseizable force of the skies. It not only gives us warmth, and not only illuminates the path in front of our feet. It also grants us knowledge concerning the earth, life, and the skies. It shows us what we cannot reach with our hands and feel with our skin. The explosion of light in the heavens, covering the earth with its incandescent shards, nonetheless carries more than meets the eye. This shower of the finest gold powder needs to pass through a sieve, filtered and looked at, speck by speck, if one is to perceive the full extent of the treasures hidden inside it. Discovering this, our forebears transformed the sand of our beaches into disks of glass and made lenses out of them, to be able to manipulate this flux of brightness. Taking one of these transparent things into our hands, we may observe the curvature of its surface, and how it bends the light running through it before reaching our eyes. We may then appreciate the marvel of precision that this instrument represents, the result of the arduous work of ancient investigators of nature and modern-day workmen.

Long before our fathers crafted the first lens, life nonetheless already produced a considerable amount of such instruments. The eyes through which we see the world contain one of them, the cornea, created without any furnace, cutting tools, nor requiring the slightest amount of polishing. This instrument of life concentrates the stream of light on the back of our eye, increasing the strength of this flux and focusing it on a dense patch of nerves, showing an ability to precisely manipulate it, a remarkable capacity to appropriate this celestial force. Let us be mindful of the role played by our two corneas, this miracle of life's evolution, as we let light penetrate our eyes, granting us a sight of the myriad of things surrounding us. We may try to feel their work of molding of the stream of radiance poured out by the heavens or the earth, by the sun or our lamps. We acknowledge this superb artwork of life, but nonetheless are not blind to the limitations of the pair of light-welcoming globes adorning our faces, knowing the extent to which the products of man's hands enhanced our capacity to see the most minute details of the earth, life, and the skies.

Standing upon the wide shoulders of our fathers, wielding the sophisticated tools they fashioned out of the earth, we can now see farther than most of our predecessors. We can plunge into the minuscule and then into the immense, with a mere change of instrument. We can now see the smallest cogs in the machinery of life in action,

and behold the most distant galaxies. Using a microscope to see something hidden from our naked eyes, we may reflect on how it spreads out the thinnest stream of light so that our eyes may be filled with the sight it offers, concealing the rest of the world so that we may behold the fullness of a tiny part of it. Using a telescope, on the other hand, we may think of the way its large aperture gathers the faintest flow of light coming out of incredibly distant stars so that it can be concentrated in our eyes and allow us to perceive it. These remarkable instruments offered to us by our world allow us to transcend the limits imposed on us by life itself, becoming extensions of our body. We should fully appreciate how large has the horizon of our world become because of these savantly-crafted assemblies of lenses. Guiding the celestial brilliance through transparent pieces of earth, molten sand, the reach of our mind now extends to the boundaries of each realm of nature. Let us thankfully muse on the extent of this reach, the horizon of our vision, enriched with the knowledge acquired through these inventions, this appropriation of light by mankind.

3.1.5 The Image - Preserving with Light

The eternal revolutions of the celestial wheels at every instant change the course of the flow of light running into man's eyes. The sun rises and circles the heavenly vault before retreating under the farthest land, and the stars perform their daily round dance around Polaris. He himself walks upon the earth and moves his head to look at different parts of the heavens, thereby beholding a scenery that is always fleeting, always in motion. Once a change has occurred, the sights of the past are gone forever, leaving only faint traces imprinted in his memory. The past fades away into oblivion as the last eyewitnesses of it return to the earth, and all that will remain of their memories are the descriptions left in written form, and if the departed had some artistic talent, perhaps drawings, paintings, or sculptures. Product of the hands of the artist, these representations nonetheless remain indirect, bearing the mark of their author, and those watching their creation have no means of assessing their faithfulness, as man at this point has yet to find a means to capture a flow of light. He has no choice but to trust those who walked the earth before he was born to know the past of his kind, of his world. The explorers of the nature of the earth and the sky would nonetheless soon offer him a more direct bond with the past and with parts of



his world that are inaccessible to him.

Man early on noticed that when an intense flow of light passed through a small aperture, in the wall of a cave but also leaves and countless other objects, it formed an inverted image of the scenery found in front of the hole, projected on the other side.⁴ Seldom observed, and by a select few, this phenomenon once more remained a curiosity known only to the investigators of nature, who found no means of exploiting this curiosity of their world to further its edification. Different from the images seen in a mirror, the projections through these holes formed miniature representations that appeared as an object, and not merely a trick of our vision. The projected image does not include its beholder. It appears as a painting made of pure light, an artwork of the heavens seen through an iris carved in the earth, one that is nonetheless even more evanescent than the images projected on our retina, as they leave no imprint on the earth, on the walls of the cave or the soil, the earth having no memory.

Patiently observed, and systematically submitted to countless

4

A work attributed to Aristotle is the first to mention natural *camerae obscurae*, with images of a crescent sun during eclipses projected on the ground through the hole found in leaves. See: Aristotle, *The Works of Aristotle: Problemata*, by e.s. Forster. 1927 (Clarendon Press, 1927), 912 (Problemata, Book XV)

trials, the earth nonetheless later revealed one of its secrets allowing man to preserve imprints of the torrents of light flooding our world. One of the properties making silver less precious than gold, its propensity to being tarnished following an exposure to the air filling up the sky, was found to allow light to leave traces upon the earth. When a ray of light strikes a compound named silver nitrate, this compound breaks down and produces minuscule bits of dark, tarnished silver. Coated with this substance, a part of the earth can then welcome the assaults of the heavenly envoys, letting itself be scarred by the luminous spears sent by the daystar, displaying the actions of the celestial host for all to see, even long after these assaults have ended. Directly exposed to the brightness of the day, a surface coated with this substance would simply be darkened completely, and only become a testimony of the passing of a flow of radiance over its surface, a beacon of the presence of light. Man nonetheless then remembered the images projected on the walls of the caves, the sight offered by small apertures exposed to the torrent of light poured out by the sun.

Man builds his home as a space sealed from the outside, with an aperture left in one of its walls to allow the entry of those who are welcomed by its owner. Reducing the entrance to a narrow opening, he can control the comings and goings. Likewise, man then learns a new manner in which he can appropriate the flow of light showering the earth. He opens up a dark space in the form of a box, sealed tight from the outside. This space nonetheless includes a small, circular opening that can be closed at will. Unobstructed, this opening allows light to penetrate this obscure chamber, and as observed in nature, such as the aforementioned caves, an inverted image finds itself projected on the surface facing the aperture. This surface is painted with light, showing different shades, different tints, offering a sight of a small part of the world, seen from the point of view of this small man-made eye that is nothing but a hole in a box. On the back of this dark space, man nonetheless then placed a piece of paper coated with the light-sensitive substance. Welcoming the painting offered by the sun on its surface, it lets itself be marked by this unique pattern of light and shadows, brightness and obscurity. The image finds itself carved on this thin slice of earth, only stripped of its colors at first. The master of light then once again completely seals the box and encloses the paper so that it would no longer enter into contact with any source of light. Plunging this paper in a special substance then fixes this image traced on the paper, clearing

the light-sensitive substance while leaving the darkened traces drawn with a silver pigment. Proudly leaving the shadows, he can then show the world an image of itself, one that is not painted by the hands of man, and influenced by his mind, but rather directly etched by the sun itself, offering for the first time a direct, unmediated reproduction of a sight of the world.

Photographs capture the state of our world and carry it through time and space. This new appropriation of light changes man's relationship with what is not *present*, that is, what is in the past, corresponding to another position of the celestial wheels, or what is remote, found on another part of the earth. The reach of man's eyes is in some way extended through the past, allowing him to peer through a window offering him sights of the world as it was before now, up until the instant the first image was etched on the earth by the sun. Pictures of the most remote lands and peoples can also now be carried across the earth and shown to all, bringing the confines of their world into their hands and into their eyes. This new power is the result of his appropriation of the celestial forces, of light itself, and he now wields it as a tool to transcend the limits of his vision, and the limits of his embodied experience of the earth, life, and the skies, as he can now see the world through the eyes of others, no matter when or where they lived.

Man's world thus appears smaller, as he can see more of it without leaving his homeland, but it also now contains more things, as the images from the past and the confines of the world now represent a continuous flow of new things becoming part of this world. He can contemplate the incredible diversity of the tree of life, the great variety of the landscapes offered by the earth, or even those of the celestial bodies adorning the celestial vault. Collected, stored, and organized, these pictures incarnate the past of his world, one that can be observed at will and shared with others. The earth slowly becomes replete with such representations of the earth, life, and the skies, painted by the luminous brush of the sun or the lamps made by man himself. The earth becomes more and more marked by the heavens, by light, which man uses to gain power of nature, as he continues his relentless exploration of this new technique of appropriation of the heavenly.

The first photographs, painted on silver, only faithfully represented the shape and contrast of things, seeing the world in various shades of gray. What is then inscribed on the paper is the amount of

light received by each part of it, while the nature of this light, such as its colors, is lost. Deprived of its colors, the world appears under a different light, and man discovers that just like an eclipse can reveal the contours of a celestial body normally hidden by its glow, the world seen as a pure contrast of light and shadow can teach us to look at it differently, and it can show us a certain beauty that remains unnoticeable when our eyes are mesmerized by an iridescence, explaining why such photograph perdures to this day. Man nonetheless persevered in his work of appropriation, and then succeeded in creating color pictures. He also used assemblies of lenses to reduce the size of the instrument and make it more versatile, more precise. Finally, he discovered that a rapid succession of images could create the illusion of movement, marking the birth of films.

The advent of moving images represents an enlargement through time of the window offered by the preservation of the flows of light passing over the earth. Man not only can look at frozen instants of the past, but he can also now enjoy slivers of time, captured as series of images etched in the earth. Progressively refined, with more vivid colors, a finer grain, and a third dimension, he can now plunge himself, experiencing inaccessible parts of the earth or the past as if it was the present. Incorporating movement, he can be touched more deeply by men and women who have long been devoured by the earth, watching the emotions expressed by their faces, seeing them interact with the world around them, as he does now. The projector with which films were shown was then replaced by electronic screens. Argentic films were replaced with series of numbers inscribed with electric charges, but their nature remained very similar. Man gained greater control over these images, becoming able to finely manipulate the flow of light they represent, even creating them from scratch according to his inspiration rather than faithfully representing nature. This convenience and this control nonetheless also brought some danger.

Man first gained control over the fluxes of light running through the air of his world in order to fix the images they carried, finally offering direct representations of what surrounded him. With time, this control was nonetheless also extended to the images themselves, making them display creations of his mind rather than reflections of the truth of the earth, life, and the skies. Furthermore, he began to create scenes, shaping the world and the behavior of men in order to produce films showing the people a life more interesting to watch than the one that they experience directly. Seduced by the fruit of



man's imagination, many then become enslaved by these illusions. They plunge themselves in rivers of light flowing into their eyes, seeping into their minds, as they offer them mirages of beauty, love, or power. Mankind becomes divided, between those who actively participate in the great race for the appropriation that defines our species, and those who flee their own presence, their own existence to live through the eyes of others, and experience events that never took place. Images become a weapon to subjugate the masses, to bend their will and shape their mind, making man love the walls of light imprisoning him, hiding from him the truth of being, the magnificence of the earth, the precious nature of his life that soon will be over, and the majesty of the skies that at each instant, everywhere on earth, offers us the most marvelous display to behold. Films can allow man to be closer to the truth of nature, seeing parts of the earth or real events that he cannot experience directly, but he can also easily lose himself in this bright window full of illusions. He may abandon his role as an actor in the play of love and war that guides and defines all living things to become a mere viewer of an illusory world, preferring a mirage of success to going through real difficulties and perhaps fail. His fate is nonetheless never sealed, and the sharpness of the chains binding him may also be used as tools of liberation.

As the wild landscapes where nature freely took its course are slowly replaced with a world brutally chiseled with man's tools, the spectacular play performed daily in the heavens and upon the earth finds itself with fewer and fewer spectators. The Milky Way is out-

shone by the colored lampions of the cities, and the soothing rumbling of the waves hitting the chiseled coasts is seldom attentively listened to. Having become a master of light, man now delights in luminous rivers shaped by the prism of our world. We can now almost effortlessly etch the most vivid images of all that we behold upon the earth, and these depictions are omnipresent around us. Walking down one of the cluttered alleys of a crowded city, we pay attention to the presence of pictures, captures of flows of light showing us a part of the earth, life, or the skies, at a precise moment in the past, one that was recorded to be shown to the rest world. Printed on paper or displayed on luminous screens, many of these images are portals to other parts of the earth, other moments of time, while others represent the pure products of men's imagination. We may attempt to distinguish faithful images of real people and landscapes from the illusory fabrications of men, the mirages created to seduce us and lead us away from the true experience of being. Focusing on depictions appearing to capture real visions of the past, we attempt to plunge ourselves into the moment it was taken, as if our eyes truly were at the place of the instrument that took it. If we enjoy this vision of the past, of a distant place on the earth, it is because our fathers relentlessly toiled to make the light shining upon the earth their own. Let us pay a vibrant homage to their talent and efforts, as we contemplate the result of their labor, now bringing the confines of the world into our eyes.

The appropriation of light nonetheless does more than merely allow us to see the world through the eyes of others. It also offers us an opportunity to re-appropriate our own past, part of what we are now. The pictures we took during our life revive the memories that faded away with the turning of the heavenly wheels. The faces of persons dear to our hearts, or the events that defined the course of our existence can be contemplated as images, torrents of light entering our eyes. Looking at some of the most precious pictures we have taken ourselves, we may reflect on the contrast between the memory and its representation in front of our eyes. We appreciate the miracle that this appropriation of light represents, fixing instants of our lives potentially forever. Long after we have returned to the earth and have been forgotten by all living beings, these traces may remain and other men may wonder about the moments they captured. Going farther in time, we may also see pictures of ourselves before the flow of our senses could leave an imprint upon our nascent mind. Taken by our parents, pictures of our infancy offer us a faithful depiction of

what we were in the first few years of our life, allowing us to better know who we were, and who we are. Going even further in time, we may find photographs of ancestors who returned to the ground before our birth, giving us an occasion to witness a prowess of life: the inheritance of the essence of life, as we see how remote forebears sometimes bore a striking resemblance to us, a privilege that more distant generations did not enjoy. We may feel the unfurling of a bond through time that such appropriation of flows of light represents, as past, present, and future are linked together through these images carried through time, intact. We may feel in our bones this connection with other living things, with other eras, and other parts of the earth, rejoicing at the extent of the power endowed to our branch of the tree of life, grateful for this heritage passed on to us.

Taking a look at our humble abode, we may see what place the captured images occupy in our lives. Observing the frames and the screens, we may realize that they often are among the most prominent things found in our living space. Like wellsprings of light in front of which we sit comfortably, the screens pour out an inexhaustible flow of moving images into our eyes and minds. We may briefly reflect on the time we spend showered by these geysers of light. Let us ask ourselves what they offer us, and perhaps more importantly, what do they take away from us? How does this ballet of swirling light shape our thought and our existence? We may now wonder whether this influence is beneficial or detrimental to us. Comparing the impressions left on paper and screens with the truth of the world in which we are thrown, we may consider whether one of them is more worthy of being contemplated than the other. The world shown on the screens may be enticing, but this is not the one in which we *are*. Our true world not only offers us a constant flux of sensations running into our bodies and minds, it also allows us to play an active role in it, to participate in the great play of nature, the most majestic spectacle that exists. Acknowledging their power and their usefulness, we shall nonetheless step back from all images. We shall flee the fountains of light representing windows filled with illusions, to soak ourselves in the truth of the earth, life, and the skies, letting our senses be overwhelmed by our own presence, as we are struck by the oneness of all the things that exist, and feel the merriment of being seizing the depths of our flesh.

3.1.6 The Wave - Reaching with Light

The cascade of brightness falling down on the earth from the sky, from the break of dawn until dusk, floods the mortals with luminous knowledge of the earth, life, and the skies. They cannot behold it directly without seeing themselves blinded, but what they see nonetheless only represents a fraction of this cascade, which extends far beyond the range of colors that their eyes can see. Like lilliputian beating hearts, grains of light are also waves, and the speed of their beating is what man perceives as different tints. The slowest beating grains of light that his eyes can see appear red, while the fastest shine with a violet hue, and the rest of this luminous tide remains concealed to him, even though his skin may feel its warmth. A large part of the radiance flooding the skies is thus invisible to us. The sun and the stars only reveal a thin band of light to man, while the rest of their countenance is veiled in shadows, while various branches of the tree of life enjoy different views of nature, as the range of sensibility of their eyes is something unique to their branch of life, refined through the ages, tailored to improve their fitness to their part of the earth.

Using his intellect, meticulously observing the traces left by what he cannot perceive on the body of the earth, life, and the skies, man may nonetheless come to know what remains unseen, and exploit what has been concealed to him. Experimenting with the flows of electrons running through a wire made of metal, extracted from the earth, investigators of nature discovered that these waves of electric current could ripple out of the wires and produce a different kind of waves propagated in the air, beating in harmony with them, that would later be found to share their nature with light. The peculiarity of these invisible waves is that pieces of metal similar to those that emit them can be used to receive them, as they are transformed back into an electric current by mere contact with them. Information carried in the form of electric currents can therefore travel the sky, even in the empty depths of the cosmos where our voices find no support. Things of the world like language can almost instantaneously reach the confines of the earth, as they are carried through the sky, without needing the air it contains, as sound waves do. Man has thus discovered a way to appropriate invisible forms of light, which sprout out of parts of the earth, metal antennas, to flood the sky with signals coming from man's world.

Man can now wield the power of the earth to transcend distances



separating men, and communities. These invisible waves also present peculiarities not found in visible light. Exhibiting a far slower beating movement, a greater interval of time between its crests and its troughs, some of them can pass through thick brick walls or dark clouds. They can slip through the rain and penetrate the canopy of the forests, reaching the places inaccessible to the light of the sun. They can pass through our bodies without our knowledge, piercing through the living and the dead without distinction. Adjusting the speed of their beating, man can then adapt them to the parts of the earth through which they are meant to travel or be stopped, and he soon finds uses for these properties. Some waves beating more hastily than light pierce through skin and flesh effortlessly, but they are stopped or reflected by the earthly nature of bones, and thus become used to see the skeleton to assess damages to it, fractures in particular. Others, beating slower than those seen by our eyes, are absorbed by our food, imparting it with their heat, and thus can be used to warm up or cook without a flame, reaching the very depths of these former parts of life as well as their surface, facilitating the preparation of his meals.

The main use of the invisible light nonetheless remains deeply linked with worldly things, things that belong neither to the earth, to life, nor the skies, such as words, ideas, and signs, things whose essence is to bear a meaning that is only revealed within man's world, by his mind. The waves carry signals not only representing words, but also sounds, images, or films encoded as long series of numbers. They can bear the content of the world and offer it to all men to see, as they spread through the sky in every direction,

reaching the other side of the planet at lightning speed. The voice of a single man can then reach mankind as a whole, instantaneously. He can be seen throughout the entire earth, potentially steering the course of humanity by his influence, something that had never been possible before. As with the appropriation of the etching of luminous images on the earth, the appropriation of the invisible light to carry the information of the world makes this world both smaller and fuller. It unleashes a torrent of things of the world into the mind of each individual man, who uses radios, telephones, television, or communication networks as extensions of his own senses, allowing him to receive new flows of stimuli, and it also allows him to reach the four corners of the earth using only a small current of electrons running through copper wires and steel antennas.

Using the force of the earth, in the form of flows of electrons running through metallic circuits, man thus floods the heavens with a form of invisible light of his own making. It coexists with the radiance of our sun and the glow of the myriad of other stars twinkling like diamonds on the dark, velvety cloak covering the firmament. The forces of the skies may nonetheless at times remind man of what is the greatest force reigning in the heavens, humbling him as he pretends to have made nature as a whole his toy, his tool. Frequent explosions on the face of the sun, projecting gigantic geysers of fiery matter toward the earth, send showers of invisible radiations on our planet. The earth defends itself and our world by deflecting these assaults with the shield formed by the magnetic field induced by the currents of molten iron running inside its depths, battles shown as emerald hue in the sky near the poles, the auroras, but they nonetheless often succeed in reaching the lower heavens, as a torrent from the sky blending with the one created by man for the service of his world, thereby rendering it momentarily unusable. Man may appropriate the forces of the sky to a certain extent, but he is far from ruling the skies.

Bent to man's will, the use of the invisible waves further increases his grip over the earth, life, and the skies, but it also radically transforms the balance of power within mankind itself. Those controlling the voices and the images carried by the waves throughout the sky to the confines of the earth can shape the minds of all those receiving them. The voice of a single man can control mankind as a whole, for the better and for the worse. Severe inequalities appear within man's world, as the voice of the masses can be quenched by the few, those who have made the invisible light a weapon for the



defense of their own interests. Once again, an appropriation meant to empower man ends up imprisoning him. A tool allowing him to reach out to all his fellow men is used to limit the range of what he hears and sees. Fed with torrents of illusions and lies, men enjoy their chains more and more, and they thirst for this flow, blind to the fact that they forget the appropriation of their own being. The weapons that harm may nonetheless be used to defend, and the invisible light may be used as a tool of liberation, using them to carry images and words showing him what he can become, what fruits may the appropriation of his own being bring him and his kind.

During each instant swept by our consciousness, we experience our own presence, our insertion in a particular place, carried through the ever-flowing river of time, with our minds continuously filled with a swirling stream of sensations. Unwillingly thrown upon the earth at birth, prisoner of a world built by our ancestors, we appear condemned to only enjoy interactions with those sharing with us the small patch of land wherein we stand. But the major part of these interactions do not primarily involve our sense of touch, taste, or smell. They are not mediated by the earth but rather by the sky, through the air concerning hearing, but mainly through light, with vision reigning as supreme king of our senses. Light connects us to the world around us, including other people, as it brings us a flow of images of them, giving them images of us in return, showing them our face and its expressions, our body, our gestures, telling them about who we are. It is a gigantic array of infinitely fine, multi-colored strands of radiance binding us to our surroundings, even

when we attempt to retreat into ourselves by closing our eyelids, as it invariably continues to display our likeness to other living things. The reach of these strands can be incredibly long, as the light of extremely distant stars appears to us in the firmament every night, like the brilliance of the daystar, but the presence of dense masses of matter on its trajectory is enough to sever this link completely. Things often stand between us and other things, cutting our bond with them. We thus observe the walls of our home, witnessing how they prevent others from seeing us and us from seeing them. Light bounces inside our living quarters, revealing them to us. Let us see how light is stopped by our hands as we place them in front of a source, experiencing this phenomenon in our flesh and bones.

There is nonetheless more to light than what our eyes can see. Invisible waves, sharing their nature with the light perceived by our retina, flood the surface of the earth as well as the heights of the sky. Even the darkest, windowless place, sealed from the outside by thick walls, is invaded by this inconspicuous flood. Beating more slowly, they are less easily disturbed by encounters with the earth, less likely to be absorbed by it. They pass through the earth and life, through walls and men, as light passes through the emptiness of the skies. At all times, our own body is invaded by these invisible waves, some of them stirred by the earth and the sky, but most now emitted by our world, devices that are products of our hands and minds. Even though we are unable to feel their passage, we may be mindful of their presence, imagine them going through our flesh, like a shock wave or a powerful, deep sound resonating in our chest, causing our bones to vibrate. Knowing them to be imperceptible, we nonetheless acknowledge their presence, aware that they carry cryptic codes representing the great variety of our world. We imagine the images, the sounds, or the texts borne by these waves presently passing through us. Observing a device setting them in motion, we picture the propagation of these waves, in every direction. They travel through the earth and the sky, weakened as the distance grows, but we may imagine how far can they go, the depths of the heavens that they will someday reach, no matter how faint they will then be.

The tides of invisible waves allow us to transcend some of the limitations of our vision. The threads they represent, binding different parts of our world and various of its dwellers together, are not severed by most parts of the earth or life. Having appropriated their nature, we are now able to reach those among our brethren who are too distant to be seen, or are hidden from us by obstacles standing

in the way. Through them, man can talk to a beloved exiled to the other side of the earth, and he can see what occurs in distant lands as if he was there. Able to choose with whom we interact at a distance, *our* world is as big as *the* world, but this also often becomes the cause of an alienation from our neighbors. Wielding invisible waves as tools, we are linked to the entire world, but we deprive ourselves of direct contact with those who are close to us, on this patch of earth we inhabit. We become more worldly, less earthly, estranged from the flow of sensations brought to our body, as we take refuge in mental interactions with men who are distant. Aware of this danger, let us now abandon for a moment the flow of invisible waves and seek contact with people in our immediate vicinity, mindful of the different nature of these direct interactions, involving all of our senses, compared to the interactions mediated by invisible waves, enjoying the fullness of what our senses offer us.

3.1.7 The Solar Panel - Harvesting Light

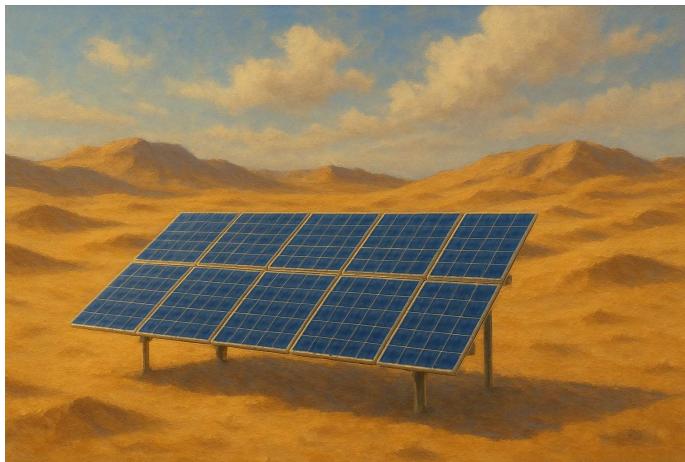
Taking root in the depths of the earth, the tree of life extends its branches toward the sky, where the radiant orb floods the living and the dead alike with its luminous gifts. Its foundation is found below, but the source of its growth is found high in the heavens, as the entire tree depends on the harnessing of light to weave earth and air into living cells and beings. Plants and algae diligently do this work of edification of life, while animals feed on them to acquire their strength, and man eats both kinds to sustain his body. Life thus depends on the harvesting of sunlight, this virtually inexhaustible gift from the sky, but despite man's great mastery of light, it took him a considerable amount of time to understand the work of the light-weavers and find a way to imitate them.

The investigators of nature knew that light could affect earthly matter, as with the silver compound used for the first photographs, but they also soon discovered that contact of light with other substances could lead to the production of an electric current. In other words, it was found that the strength of the sun could be imparted to the earth, liberating electrons from the atoms imprisoning them and causing them to flow through metallic wires, a flow that can be used or stored in special substances taken from the earth forming batteries. The celestial key of fire enters a lock made of earth, and this opens up miniature vaults of energy, which then gushes out and is guided by the hand of man so that it can benefit his world. This

implies that the cascade of brilliance falling on the earth can be used by man in a manner somewhat similar to the one invented by the light-weavers. The bountiful gift of the sun can serve man's world, giving an impetus allowing its further edification.

Slowly refined and made more efficient, the light-harvesting technique led to the creation of specialized devices, plates of various sizes that fill electric batteries simply using the fiery rays of the sun, turning the strength of the sky into one found in the earth: solar panels. To depend on the sky nonetheless implies accepting certain constraints tied to its nature. The sky is ever-changing, constantly in motion and in some ways unpredictable. The brightness of the great luminary is not a continuous flux flooding the earth at all times. It only shines between dawn and dusk, hitting the earth with varying angles, and the clouds passing over our lands often absorb it almost completely. Man can draw energy from this torrent of light almost anywhere on the face of the earth, but he cannot do so at will, as he must wait for the right disposition of all the heavenly forces, the alignment of different celestial wheels. This shows a contrast with the earth, which exhibits great stability and reliability, and provides more reliable sources of energy, even though they are less accessible. The rivers running through the dams built to generate electric currents flow day and night, summer and winter, with only slight variations of their flux tied to the generosity of the clouds above them, pouring down the liquid of life onto the dry land. Coal and oil can be extracted at all times from the depths of the ground, but only in particular parts of the earth. Man is therefore forced to submit himself to the nature of either the earth or the sky to power his work of edification. The strengths of the heavens are accessible anywhere on earth, but not anytime, while those of the earth are accessible anytime, but not anywhere. He nonetheless does not necessarily have to choose, as he can appropriate both, combining their use to avoid the constraints posed by both realms, thereby ensuring an uninterrupted supply of force, readily available.

Sunlight is found everywhere on earth, but this does not mean that the quantity received by each land is the same. Some of them are frequently enshrouded in thick woolly clouds, only letting a thin mist of light through, while others are blessed with constant showers of radiance, only interrupted by the setting of the glowing star. The amount of energy provided by the panels is also relatively modest compared to the surface they occupy. Vast fields of these man-made giant leaves, paired with enormous arrays of batteries, are necessary



in order to fulfill the hunger for power of even a small community. They nonetheless present a significant advantage, the fact that it does not come from the earth, and thus man does not deplete its limited resources when he draws power from the heavens. Contrary to the exploitation of the earth, man could exploit the radiance of the sun without restraint as long as it will shine, and its extinction would in all likelihood also imply the withering of the tree of life no matter what. This is not so with the realm below, as in only a handful of generations man has almost stripped the earth of the remnants of distant forms of life we call coal and oil. He cannot entirely rely on the limited resources of the earth, and thus the appropriation of the heavenly forces such as light represents a solution to make the edification of his world and his life sustainable for the ages to come.

The impact of the appropriation of the power of our star remains rather modest. The presence of the flat, artificial leaves harvesting the gifts of the sun steadily grows as the wealth of the earth becomes rarer and more difficult to extract, but they only fulfill a small fraction of the needs of man's world. The capacity to harness the strength of the daystar nonetheless represents an inconspicuous but important step for mankind, as it opens up the possibility of greater independence from the earth as a whole. Giant sails formed with the artificial leaves may allow man to use to the radiance of the great luminary, and of any other star sufficiently close, to move through the depths of the skies. The quantity of earthly fuel that can be elevated to escape the downward pull of the earth and reach the highest skies is very limited, and thus a reliance upon the wealth of the earth to travel far away from it would severely narrow the range

of his exploration. Unlike the earth, the stars can give a spacecraft a continuous flow of energy from afar, without the need for storing it, a flow that could last for the duration of the life of these glowing spheres. This form of appropriation may thus one day be key to a departure from the earth out of which life rose, and man may sow the seeds of new trees of life into new earths, circling around new suns, marking the beginning of a new stage of life.

Life is the offspring born of the encounter between the light and air found in the skies on the one hand, with the water and soil forming the earth on the other. Looking at the jade-colored coat of life covering our country, the grasslands, fields, and forests, we can see these countless living things extending their substance toward the blazing wheel of the sky rising in the east and rolling westwards every single day. Their leaves and blades form surfaces made to meticulously collect the same brilliance as the one now illuminating the depths of our eyes. Carefully observing these plants being struck by the luminous envoys of the sun, we may imagine what takes place inside every one of them, as each ray of light becomes trapped by complex substances, encapsulating their energy in the form of bonds between infinitely small specks of matter so that it can be made available to each cell forming them, allowing these living beings to grow and multiply. They exist because life learns to appropriate this daily deluge of brightness, and we ourselves entirely depend on their arcane art, the harvesting of sunlight. These green plants are eaten by the throngs of animals roaming the earth or flying through the sky, while algae sustain the smaller marine creatures. Larger beasts feed on these light-weavers that we contemplate now, and we feast on their flesh to allow our body to grow in stature and strength. Let us admire the remarkable efficiency and the sophisticated elegance of life, this realms learning to exploit every single resource in its reach, regardless of whether it comes from above or below.

We turn our eyes away from the marvels of nature, our ears away from the gentle rustling of the leaves balanced by the wind, to return to the crude, sharp-angled artificiality of our world. We set our eyes to one of the man-made panels attempting to imitate the exceptional wisdom of life, its ability to harness the strength of the daystar, observing its sleek, reflective surface, and we attempt to see in these devices the leaves of our world, turning light into a force that can be used to act upon the things of the earth, of life, and of

the skies. These wide leaves of glass can set in motion small objects, or cause a lamp to shine brightly. Their strength can be directed to extirpate water from the darkest abyss, and it can stir invisible waves carrying our voice to a foreign land. Letting the sun hit our skin, feeling the warmth imparted on our blood being propagated throughout of body, we may appreciate the precious nature of this gift of the heavens, which not only allows the existence of life but also contributes to the edification of our world. We now feel this light deep inside of us, knowing that this sack of moving matter that we form is also indirectly powered by the incandescent star setting the pace of the day, as our body is ultimately made out of leaves, blades of grass, or algae, turned into flesh, sinews, blood, and bones. The artificial leaves of our world play a similar role, and some of the things we see around us may have been shaped by the energy produced by such leaves. We may muse on the crucial place occupied by the sun in our existence. Enthroned in the heavens, it pulls us away from the earth. It causes us to grow and extend ourselves higher and higher, liberating ourselves from the smothering embrace of the earth, desperately keeping us close to its rocky surface, never wavering, never letting go. Having now begun to appropriate this force, we may ponder the question of how should we wield with this new power.

3.2 The Air

The entire earth is clothed with a translucent garment covering the seas as well as the dry land, the summit of the loftiest mountains and the bottom of the deepest crevasses. Man welcomes the air filling up the sky in his chest, and it offers him some of the strength he needs to continue to exist, as a creature standing upon the earth rather than one buried underneath its surface. Ungraspable and invisible, the air is nonetheless one of the major forces of nature that man encounters. It can uproot trees that lived through centuries or extinguish the fire of life burning within the flesh of animals by robbing them of their heat. This ethereal force nonetheless appears to be led by randomness or by providence, as it remains largely unpredictable, with the commotion of the humblest parts of life enough to trigger tempests on the other side of the planet.

Unseizable by hand, the air nonetheless can carry the heavy loads of water watering the dry land, and it can be shaped by the other major force of the heavens: light. Imparted with heat, from the splendor of the sun or fires kindled upon the earth, the air expands, pushing what stands in its way. The vivifying star thus stirs up the air daily, giving birth to tempestuous winds sweeping the earth. The runner of the race sees these winds as a force to be harnessed and used for the elevation and extension of his world. He wants to lade the air with his own burden, putting it to work for his own benefit, and unscrupulously pouring the wastes of his world in the vast expanse of the heavens, soiling its immaculate nature, covering the earth with an opaque smog, often forgetting how much his life depends on this gigantic reserve from which we all draw our breath, keeping us part of life.

3.2.1 The Rack - Drying with the Air

As soon as our tree-dwelling ancestors began to stand on their two feet and explored the vast plains found around the slowly disappearing woodlands, they grew more intimate with the winds blowing on the open country. At this point, man becomes acquainted with their work, as he feels the moisture of his lips, eyes, or skin carried away by these massive gusts of air passing over his body, taken up to be poured into the celestial vaults, becoming part of the woolly legions of clouds gliding on the air, heading toward the horizon. Ex-

posed to the invisible currents engulfing the earth for entire days, his skin shrivels and peels, with flakes falling down to the ground. His eyes sting, forcing him to close his eyelids to protect his retinas, as his body fills his eyes with tears to defend them from this assault of the skies. His lips become cracked, and traces of blood appear on them, forcing him to frequently pass his tongue on their surface to coat them with saliva as a means of protection.

Another effect is nonetheless also felt. The winds, breath of the skies, not only rob man of the liquid of life pervading the outer layer of his body, they also attempt to speedily force his flesh to share with them their warmth or coldness. Stagnant air already imparts heat or cold upon his skin, forcing his body to sweat if the heat is suffocating or to shiver if the cold is unbearable, but the pace of this work of the winds is correlated to its speed. The more exposed to the ethereal stream he is, the more intensely its effect is felt. As the icy winds of the winter slip underneath his thick clothes, he feels his precious warmth being taken away by the breath of the heavens, bringing discomfort, and thus flees away from them, retreating into the earth, behind walls denying entry to the celestial forces, to preserve his wealth of heat. On the contrary, when the bright months come and the earth is enshrouded with suffocating heat, flooded with fire poured from the fountainhead of radiance circling the celestial vault daily, he gladly exposes his skin to the breath of the skies, letting it relieve him of the burden of warmth weighing down his flesh, causing him to sweat profusely, as an offering to the winds, inviting them to carry away the fieriness of his skin, calming the commotion reigning between the smallest bits of matter forming each one of his cells.

As man begins to notice the effects of the air and the winds upon his body, he naturally attempts to appropriate these forces of the skies. He ceases to passively experience their different effects, and now attempts to use them for his own benefit, not only for his body but for his world as a whole. Having experienced the desiccating power of the winds on his flesh, he now knows that this power can be used to dry the things of his world. All that he needs is an earthly object holding these things high in the air, allowing most of their surface to be caressed by the mighty breath of the sky, facilitating the extraction of the moisture covering them by the invisible hands of the winds. Life itself provides him examples of structures that would be satisfactory in this regard: the naked branches of the trees, as their offer a sufficient elevation and their thin, long nature allows



him to hang objects on them, such as the skins of animals or clothes damped by the rains, offering an important surface of contact with the air. Breaking these branches and creating racks with his hands or tools, he can then bring them to the naked plains and the top of hills, where the winds blow tempestuously, and their drying power is considerably enhanced. This rudimentary device marks the first step in man's appropriation of the winds.

The appropriation of the drying power of the winds leads to a strengthening of man in the battle he continuously wages against other branches of the tree of life. The most inconspicuous and rudimentary of them indeed often prove themselves to be among his fiercest enemies. The mold and fungi whose spores are invisibly carried by the air onto the surface of both the living and the dead constantly colonize his food, his clothes, and even sometimes his skin, finding on them an ideal blend of moisture and nutrients necessary for their growth and reproduction. The plants and animals he painstakingly collected, cultivated, or raised are eaten under his baffled eyes by these minuscule living things, causing them to become unfit for his own consumption.

Growing in wisdom, understanding the nature of life, man nonetheless comes to realize that he can prevent these relentless assaults on his possessions by rendering these things inhospitable to life. The most basic necessity of all living things is access to water, no matter how modest, and thus, by stripping objects of the moisture pervading them, man may render them unappealing to the invisible forms of life that are unable to move by themselves to find water and thus can only live in places providing both water and the nutrients

necessary for their sustenance. Wielding the strength of the winds blowing over his land, he then places some of the fruits, plants, fish, and meat he does not want to consume immediately on the drying rack, sometimes cut into thin slices facilitating the evacuation of the totality of the moisture present in them. Exposed for days to the continuous flow of the breath of the sky, these former parts of life are soon deprived of the liquid of life that formed the oil of their internal machinery and allowed the countless reactions between the bits of matter forming them to occur. Slowly becoming thinner, shriveling up, these things become less and less attractive to molds and fungi. Man thereby wins the war against them, preserving his food and allowing him to make reserves for the times when nature is less generous with him, such as when winter comes, and the tree of life as a whole suffers from the longer absences of the heavenly radiance and the warmth that comes with it.

Using the work of the winds, man thus drives a wedge between his possessions and other branches of life, offering the vivifying liquid to the skies, knowing it will someday be given back when they unlock their vaults and pour their content down to water the dry land and the tree of life as a whole. The dry leather he wears is no longer moldy, and the food of his pantry no longer rots. The winds are now his ally, exalting him among the other branches of life, allowing him to withstand the times when the upper realm denies its luminous gifts to the living more easily, periods of droughts or harsh winters, when the securing of food becomes problematic. Dried food also allows him to reach new parts of the earth that are inhospitable to life, as he can now travel with the means to sustain himself for weeks or even months in lands where life is too scarce to provide for him. Appropriating this force of the skies, man thus gains more power over the life and the earth. He can nonetheless also more boldly face some of the dangers coming from the heavens, such as the downpours chilling him to the bone, wetting his garments, knowing that as soon as they cease, he can offer this water soaking his clothes back to the winds, which will bring it back to the clouds, and later water his pastures or fields.

On the fateful day we came out of the womb to be thrown into this beautiful but cruel world, naked and covered with water and blood, we immediately felt the embrace of the air chilling our skin, before we enjoyed the warmth of the motherly breast, even though

this experience does not appear to have left any perceptible trace in our memory. Baptized with the dry breath of the heavens was every single one of us, prior to beholding the blinding radiance of the fiery jewel of the heaven or before we stood upon the rocky crust of the earth. So used to being wrapped by the winds since our infancy, we only notice their omnipresence when they bring us pleasure or discomfort, or when their work in some way disturbs the quietude of our world, such as when they break the branches of trees in a fit of rage or violently carry away the objects around us, threatening the lives of those around. Going out to greet the winds, to expose our bare skin to their delicate embrace, let us enjoy their gentle touch. We feel each one of the hairs covering our body harmoniously undulating with them, tingling the underlayers of our skin and triggering waves of sensations rippling through our mind, leaving pleasurable feelings imprinted in the depths of our conscience.

The exhalation of the skies, the spirit of the heavens, is nonetheless more than a comforter, something that soothes our anxiety and appeases our fears. The multitude of pearly clouds hovering over our lands is made by this exhalation, as the winds rob the surface of the seas heated by the fiery envoys of the blazing orb in the sky, as well as the dry land of their moisture, or even the living. Feeling the soft caresses of a gentle breeze or violent gusts causing us to lose balance, we may attempt to feel how the celestial currents take away the liquid of life found in our skin, leaving it drier. We may imagine the water that ran down our throat during the last few days; It now pervades our flesh, being carried away from us to join distant masses of woolly clouds that will soon reach other corners of the earth. We may also feel how these winds either attempt to offer us heat or to snatch ours away, trying to force us to share an equal temperature with them, as they exert their power on our skin and in our flesh.

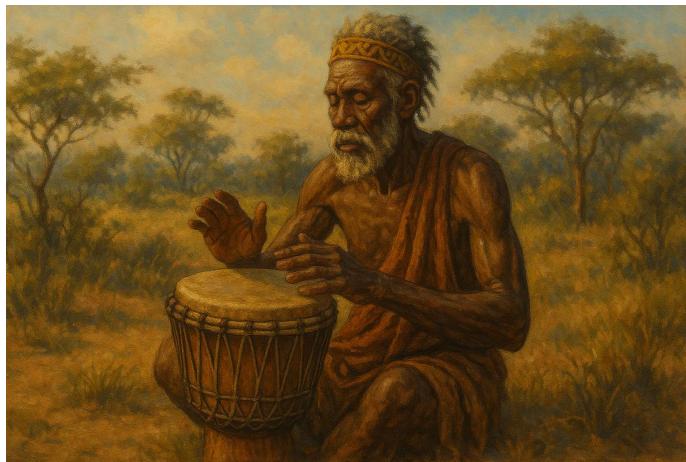
Placing our freshly-washed garments on a drying rack or a clothes-line, we may notice how these inventions of man are designed to only be in minimal contact with what is hung upon them, leaving almost all of their surface exposed to the swirling fluxes of air blowing over the land. Contrary to its effect on our skin, the work of the heavenly breath is easily noticeable on the wet clothes hung outside. In most parts of the earth, less than half a day would allow us to see the liquid of life be completely drawn out of them. We may witness this work of the skies by observing the winds gently caressing these pieces of fabric, woven from former parts of life, seeing how things soaked with moisture slowly become dry, without us seeing the path taken

by the invisible droplets of water departing from them. We may also contemplate the object allowing this event to occur, this primitive, rudimentary invention, that nonetheless represents the first step in the appropriation of the wind by our species. We may wonder at this remarkable simplicity but admire its usefulness, as well as its continuous presence in the lives of men, since times immemorial. Let us recognize the efforts of our fathers, who thereby initiated our appropriation of a new force of nature, strengthening our branch of life and increasing our capacity to overcome the redoubtable challenges encountered during the brief time given to us to spend upon the earth.

3.2.2 The Musical Instrument - Feeling with the Air

Stormily blowing upon the emerald canopy of the forests, the winds stir up the myriad of leaves, and they whisper in unison, offering man waves of gentle sounds running into his ears, calming his troubled mind. The breath of the heavens also rushes into large seashells lying on the beaches, into the opening of caves carved by the work of time in the rocky crust of the earth, producing whistling and rumbling sounds, intriguing him, leading him to ponder the nature of these perplexing sensations. The first men had no notion of the nature of the air enveloping their world, but they saw and heard the link between movements and sounds. Plucking a string made of remnants of living things, such as a sinew, they saw how the speed of its vibration was correlated with the tone of the sound it produced. Using long bones to hit rigid objects, they heard them resonating, producing a pleasant tonality carried by the air of the skies. Man thus came to know how random sounds could be produced, using things belonging to the earth as tools completing the instrument offered to him by life itself: his voice.

The arrival of a new human being into the world is often accompanied by loud cries, as the infant instinctively proclaims his anguish caused by the departure from the warm, watery refuge, the motherly womb. Then progressively learning to imitate the sounds produced by nature and the other living things present around him, he develops a command of his own voice, speaking, singing, or whistling to signal his presence, to communicate his feelings and thoughts, or simply to produce sounds delighting the ears of others as well as his own. This voice is nonetheless limited. The range of tonalities he can emit is rather narrow, and he cannot modulate them as swiftly



as some other creatures such as birds. The lords of the air wake man up with melodious songs sounding sweeter to his ears than the voice of most members of his kind, causing him to realize that he will need a different instrument if he wants to transcend the limitations of his vocal tract.

With his capacity to produce and hear sounds, man possesses an innate ability to appropriate the air for his own benefit, but just as a forged sword can be more efficient than long claws, man learns that the products of his hands can surpass the fruits of the play of love and war, the result of life's evolution. He thus begins to experiment with the earthly objects from which he already heard sounds. Using bones or pieces of wood to hit different objects, he soon finds out how the size and the material of these things influence the sound produced. Lining up series of such objects according to the tonality they emit when struck, man can then play sounds on a range wider than his own voice, and sounds that will be produced consistently. Contrary to his voice, whose range is continuous, the one of his new invention is discontinuous, as each object lined up to be struck is associated with only a single sound. The infinity of tones produced by the vocal cords and carried by the air has been reduced to a set of limited notes, cutting out the continuity of the earth and the sky into a collection of things of the world, metaphysical concepts, notes that will later be endowed with names and represented with symbols.

Likely unbeknownst to its inventor, the first musical instrument thus represents a means of further appropriation of the air. Striking it vigorously, he can create waves invisibly rippling through the sky,

waves whose reach is far more extended than the one of his voice. Speedily beating on its different parts with one stick in each hand, he can create melodies whose pace can exceed the ones produced with his mouth, with an unequalled precision, as each note is perfectly reproduced each time its corresponding part of the instrument is struck. The player thus very accurately controls the vibration of the air around him, with a minimal effort. With simple movements of his upper limbs, he changes his environment, marking a part of it with the seal of his imagination in the form of melodies and rhythms, patterns of waves carried through the air, penetrating the earth and soaring through the sky. The main effect of this new manner in which the music player appropriates life is nonetheless exerted upon his brethren.

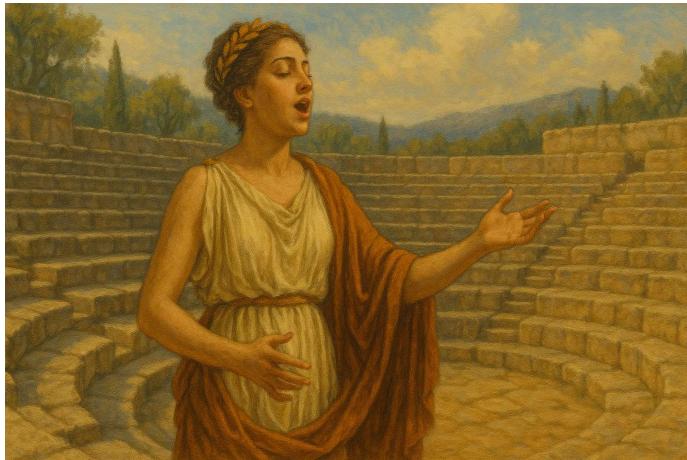
With harmonious successions of notes and entralling rhythms, the player can indeed strike a chord in the depths of man's mind, a phenomenon that keeps much of its mystery. Using the air enveloping the world of men, filling their chests and their ears, the player can trigger waves of audible pleasure resonating in their flesh as well as their mind, causing cascades of emotions in their heart, which in turn invite them to react by moving their bodies, dancing in unison with these precious but evanescent waves carried by the air, as if they intended to produce an echo to these melodious sounds. The player thus gains power over his audience, as he can grant or deny pleasure or other emotions triggered by his tunes, a talent that most men do not possess. He wields the air around him as a tool, an instrument that gives him a certain control over those listening to his melodies, as he can evoke nostalgia as well as provoke terror. He can cause melancholy or set off explosions of mirth. The earth receives his compositions. The sky welcomes his performances, but the realms above and below nonetheless remain indifferent to them. They impassively let themselves be penetrated by the waves he stirs up. Only a few branches of life, the most elevated ones, can understand their meaning. Only living things can let themselves be touched by these sounds in the depths of their being, actively reacting to them. Some animals may appreciate man's music in their own way, but only the members of his kind seem to be able to truly open their heart to it, letting it profoundly shape their emotions.

Appropriated by the music player, the air thus becomes a means of reaching out to other men, a means that largely functions on a very instinctual level, touching his most profound nature, as it often transcends the barriers impeding others forms of communications

such as spoken language. Heard in the four corners of the world, in vastly different eras, certain melodies can be almost universally appreciated, by men who do not share a common language, a common culture, but only their human nature. The world of sounds also in a certain way mirrors the opposition between earth and sky, and carries some form of universal meaning, as sound waves beating slowly are associated with what is "low", the earth, while those beating fast are called "high", linked with the heavenly. The appropriation of the air by the musician is nonetheless not limited to a mastery of the production of notes. It also involves an appropriation of silence.

An absence may sometimes carry more meaning than a presence. Silence may speak louder than the most deafening voice. The tunes played on the musical instrument present a doubly discontinuous nature. As mentioned before, there are gaps between the different notes of the instrument, which for example correspond to the different objects struck by the stick held in the player's hand. When they are played, notes are nonetheless not played continuously, seamlessly succeeding to one another, as this does not allow the mind to efficiently grasp them as individual sounds and thus appreciate them justly. Moments of silence are left between them, allowing their boundaries to be heard, and the mind to seize them as identifiable sounds. In the same manner in which total brightness is as blinding as total darkness, a contrast is necessary between notes and silence, and it is this opposition that allows meaning to arise. For the player, to know how to bring the sea of air enfolding him to a perfectly still state is therefore as crucial as to be able to stir up powerful waves resounding through the sky. To appropriate the air involves control, and by imposing moments of silence the player exhibits as much control as when he produces sounds.

Once the concept of musical instrument penetrated man's world, he began to explore the possibilities offered by the earth and life to make different kinds of them. This movement probably began with the aforementioned percussion instruments, earthly objects struck by sticks of bone or wood. Winds may have followed, in the form of bone flutes for example, as one of our ancestors discovered that he could pierce holes in large seashells, hollowed bones, or pieces of bamboo and blow air into the tube they formed, closing the holes with his fingers to produce different notes, thus inventing the flute. The wind instruments represent a more intimate form of appropriation of the air, as they become direct extensions of the player's mouth, with the sound produced by his own breath, causing a resonance



between the instrument and his chest, as he feels one with it. Then, the strings appeared, as man noticed how certain parts of life like sinews or bowels could be pulled into long filaments that showed a great flexibility, and he discovered that when plucked with his fingers, they vibrated and stirred up sound waves carried by the air to his ears, progressively becoming inaudible as the vibration faded away. This new step in the race for the appropriation of the air had a profound impact on mankind as a whole, from the remote past when it began until the present day. Isolated on different parts of the earth, different peoples, different branches formed by mankind, thus created different instruments and composed following different customs. Each one of these branches passed on their most powerful compositions, those touching the heart of man the most efficiently or the most profoundly, to their neighbors and children, leading to the birth of the various musical cultures that are now part of our world.

As a source of inexhaustible pleasure, the appropriation of the air through music may nonetheless also once again lead to an appropriation of man by his own creation. Captivated by hypnotic rhythms, bewitched by melodious tunes, he may seek refuge in the beauty of the musical world, the compositions created by his kind and part of his world, and thereby grow distant from the truth of nature. His mind enraptured by the sounds of men, he may cease to pay attention to the voices of the multitude of creatures forming the animal branch of life, his distant cousins. He may forget the music of the heavens, the soft whisper of the winds caressing the leaves or the terrifying roar of thunder, and he may ignore the tunes of the

earth, the soothing rumbling of the waves of the sea rolling on sandy shores, or the grumbling of the soil shaken by earthquakes. Losing contact with nature, as he spends his days focusing his attention on the creations of men, the things of the world, he slowly alienates himself from his true nature, which calls him to seek contact with the realms above and below, and with other parts of life. Fortunately, music itself may become a guide leading him back to this truth of nature, as the beauty of some tunes may evoke previous experiences of an intimate contact with the earth, life, or the skies, or by itself induce a mystical experience, pointing the way to go, inviting him to flee the world and to return to the open country, where the oneness of the creation may more authentically be felt.

Shutting ourselves inside our home, closing the windows and turning off the flurry of appliances disturbing the relative stillness of the air, we may have the chance to experience a moment of well-deserved quietude. The undisturbed nature of the air that we breathe and that seeps into our ears nonetheless may kindle a feeling of anxiety. Engulfed in complete silence, we are indeed forced to face the fears we usually ignore because our attention is attracted to a multitude of things and events in our world. Patiently letting our hearts be pervaded by this absence of sound, by this sudden and disconcerting peace, we experience the need for sounds in our lives, and especially the sweet sonorities of musical instruments. Even plunged in the most absolute silence, vague traces of the tunes of our world can be heard echoing within our head, and we may feel the need to revive our memories, playing songs in our mind or humming them aloud to shatter this peaceful and yet surprisingly oppressive tranquility.

Seizing a suitable object in our vicinity, something rather elongated and thin, we may then undertake to break the silence reigning within our home, by hitting this object against another, one endowed with hardness. On the point of impact of the two things, a wave is triggered, which almost instantly reaches the depths of our ears, and through them, our mind. The thin objects can be felt vibrating in our hand, in unison with the sound resonating within our walls. We feel this vibration slowly vanishing as the sound it produces also fades away. We may pay attention to the peculiarities of this sensation tickling our ears, before noticing the inconspicuous return of silence. We may compare the crudeness of this sound with

the harmonious notes coming out of instruments we heard in the past, which bear the mark of man's labor. Trying to whistle a tune we know and love, we may come to realize how difficult it is for us to reproduce the notes of its melody with great exactitude. We may recognize our helplessness, and value the toil of our ancestors, who fashioned the earth and remnants of living things to offer us a wide variety of refined instruments, thereby allowing us to considerably improve our capacity to produce harmonious sounds.

Listening to someone skillfully playing an instrument, engulfing our home with waves after waves of notes carried by the air around us, we are invited to enjoy this experience, letting each note resonate deeply inside our head. We wholeheartedly welcome what this song attempts to evoke, opening up our heart and letting it be touched by it, allowing the release of the emotions its author intended to trigger in us. We may then experience the desire to let our body echo with these waves, balancing our torso or dancing in unison with them, thus unleashing new, inaudible waves propagating between our walls. We may now consider the origin of this tune, how it was composed and how it found its way throughout the world and into our ears. Would we be able to discover such a beautiful series of notes, with exquisitely chosen sonorities, elegantly succeeding to one another and adroitly paired with moments of silence? Let us attempt to grasp each quantum of sound with our mind, recognizing how they are bounded with silence and how each note is also separated from those above and below it by a gap, an absence of the possibility of the presence of waves beating at an arbitrary pace if the rules of this tradition are respected, a tradition ensuring harmony. Finally, we may now ponder on the place occupied by these instruments of appropriation of the air in our lives, on whether our enjoyment of such music may cause us to lose a taste for the sounds of the earth, life, and the skies, thereby perhaps alienating us from the beauty of nature.

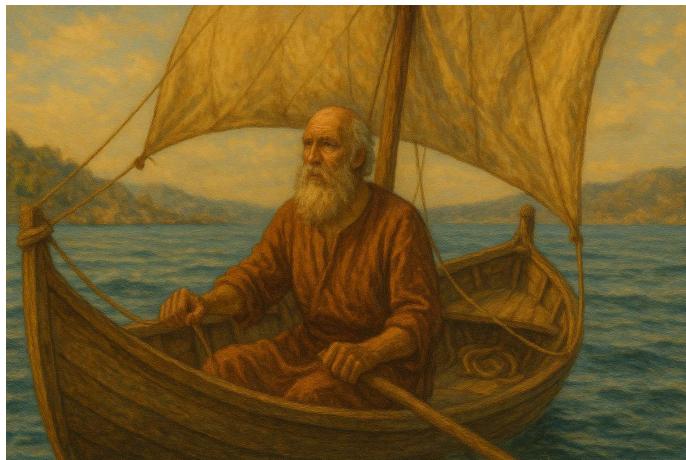
3.2.3 The Sail - Harnessing the Winds

A soft breeze blowing on a meadow causes the daisies to gently shake their heads, accompanied by prostrations of the blades of grass, bowing to this ethereal force reigning over the lower heavens. It also blows within man's world, delicately enfolding his buildings and inconspicuously sweeping away the dust covering the alleys of his city. Man only notices it when he stands out in the open air

to appreciate moments of contemplation of the sky, and it remains largely ignored as he busies himself with the things of his world. When the ungraspable currents are more vigorously stirred up, especially by the struggle between those enjoying a different level of commotion in the bits of matter forming them, that is, their cold or hot nature, then does he regain an awareness of the power of the winds, of the might of the heavens. Walking on an elevated part of the earth, one protruding from its flat surface and bringing him closer to the heights of the skies, he can experience their force pushing his chest and attempting to topple him down, as if they refused to see this earthly creature proudly standing erect, defying the upper realm. Resisting the push of the winds, man witnesses their strength as he opposes their work, and his curiosity is awakened.

Man soon notices that when he holds on to the hide of an animal with his arms extended, it becomes considerably harder to resist the push of the winds. The greater the surface it occupies, facing the direction of this ethereal current, the more intense is the effort demanded to his body to avoid being carried away by it or simply forced to lay down on the ground. This experience may become playful, as he may enjoy feeling the firm embrace of the invisible hands of the heavens, taking him away to another part of the earth, and he may thus seek to increase the surface of the obstacle he places in the paths of the winds and holds in his hands. The push of the winds is nonetheless counterbalanced by the pull of the earth and the friction it causes when one is dragged across its surface, but man knows that all parts of the earth are not equal in this respect. The womb of life, the vast expanses of water surrounding the dry land, allows things belonging to the earth and to life to glide on its surface or swim in its depths with only a negligible friction. Boldly facing strong winds while holding a large piece of leather or cloth, as he floats in a rudimentary embarkation, he sees himself effortlessly carried away, taken by the winds in the direction toward which they are headed. He thereby invented the first means of harnessing the strength of the winds, the sail, appropriating a new facet of the air enfolding the earth.

Once the usefulness of the sail was discovered, it probably was swiftly the object of experiments. No longer held with the hands, it is attached to a mast and a boom, ensuring that its surface is entirely exploited. Because this surface needs to be facing the direction of the wind if one wants to use its strength to be carried away, the assembly is therefore designed to be able to rotate. This allows



the boat's captain to turn the sail to make it face the wind while keeping the boat on a course that may not follow the direction of the breath of the skies. With this ingenious invention, man exploits the perpetual conflict between earth and sky, using a piece of earth and elevating it in the sky, knowing that the winds would try to bring it down, vigorously pushing on it, as they do on everything that dares to protrude from the surface of the earth. Balancing the need for the largest surface possible for the sail and the need for lightness of the entire boat in order to be swiftly carried away, the shipbuilder refines his creation, meticulously shaping pieces of earth so that they would efficiently serve his world as they encounter the torrents of air blowing over the oceans, rivers, and lakes.

The sailor then effortlessly glides over the face of the waters, no longer needing to use his own strengths to row, only maintaining the sail against the winds by pulling the boom in the right direction. Through this appropriation of the currents of air sweeping lands and oceans, man uses the sky to reach out the confines of the earth, asserting his domination of it. Distant islands and continents, separated from his homeland by vast seas uncrossable with the force of his arms, now suddenly become accessible. Mankind slowly spreads all around the earth, crossing the waters and conquering new lands, which become part of the walking creature's world. As if it assisted mankind in its subjugation of the earth, the celestial forces carry him with vigorous gusts of air. This flow is nonetheless inconstant, and thus the sailor is always at the mercy of the unpredictable whims of the skies. This invites him to weave a stronger bond with the upper realm, as he spends time discerning the signs displayed on the ce-

lestial vault that may indicate the mood of the heavens for the next day, and the force or direction of the ethereal current that will run over the face of the earth. This relationship of the navigator with the skies is especially important because the frailty of his embarkation, compared to the might of the heavens, makes him an easy prey for the rage of the realm above, tempestuous winds that can capsize his boat, or the anger of the one below, stirred up by the winds and the moon, causing the emergence of gigantic waves threatening to engulf him and bring him to the frigid and dark depths of the ocean. By jumping into his boat and taking distance from the coast, he performs a leap of faith, expressing a form of trust, putting his life in the hands of the heavens.

The sail showed man that he could harness the power of the winds to spare his own efforts while navigating the waters, but seeing how some parts of the dry land were frequently engulfed in powerful fluxes of air, sometimes with an almost constant direction such as in deep valleys, he endeavored to find a means to harness this force on the dry land. Building upon the foundation handed over to him as an inheritance by his ancestors, he probably was inspired by waterwheels, which harness the strength of the earth, in the form of flowing water, to perform various works for the service of man. The flow of rivers is nonetheless of a different nature than the one of the winds, not only because of the different nature of the fluid forming the flow but also because of their boundaries. The waterwheel turns because the water only pushes its bottom part, alone immersed. Raised above the waters and exposed to the winds, the wheel is motionless, like it is the case when it is entirely plunged in the flow of water, as the push on the upper part counterbalances the one on the bottom part. A solution was nonetheless found. The axle of the wheel is made to face the direction of the wind, and the blades are inclined toward it. This inclination redirects a part of the force of its push, steering it away from the direction of the axle and causing each blade of the wheel to turn harmoniously, driving the axle, whose rotation can be used to turn a millstone for example. Man thus invented the windmill, bringing his appropriation of the force of the winds to the dry land, guiding air so that it would work for him. In recent times, the windmill gave way to the wind turbine, using the same principle to transform the currents of the winds into electric currents, thereby allowing the strength of the skies to be poured into the earth, into batteries acting as reserves of power that can be used for various purposes.

Appropriating the power of the air, man has now access to another source of energy, one that does not rely on ephemeral resources. Like solar power, it is a sustainable one, as the winds will certainly continue to blow over the face of the earth for as long as the planet exists. This strength of the heavens can lift up a part of the burden he carries upon his shoulders for the edification of his world or the securing of his sustenance. The time and efforts spared thanks to the benevolence of the skies and the sharp mind of his forebears allow him to do more or simply to enjoy moments of contemplation. Day and night, the blades of the windmills or turbines do their work, selflessly contributing to the building and support of our world, even though not all lands are equally blessed with an abundance of this resource. The sail allowed man to enlarge the horizon of his world, conquering the four corners of the earth, but it also made it appear smaller, as it took less time to reach the confines of the world.

Within the walls of our home, we welcome the presence of the air from which we draw our breath, and sometime let the whirling winds inspect its every corner and chase away both foulness and moisture, when the weather is sufficiently clement. To encounter the true nature of the “spirit” of the skies, one nonetheless needs to venture outside, leaving the narrow alleys and the streets surrounded by imposing walls to seek elevation, a belvedere where the horizon is clearly visible, the top of a grassy hill or the summit of a pointy tower of glass and steel, one of the pillars of our world. There can we meet this unseen force tirelessly sweeping the earth. Reaching one of these elevated locations, we feel the pressure exerted by the air running about our skin, allowing us to gently touch its ethereal substance, seldom noticed. As a more powerful gust strikes our torso, we feel the vigor of the celestial current, attempting to carry us with it, wherever it goes. We may then compare this transient horizontal push with the omnipresent downward pull of the earth. How feeble and fleeting is the first compared to the latter, which is as strong as it is permanent, but we nonetheless feel ourselves losing our balance because of it, a demonstration of our weakness as we face the unequaled greatness of the heavens and the earth.

Having waited for an opportune time, we then seize an object with a large surface, made to stand against the wind as we brandish it against the sky, a piece of fabric or a wooden plank, perhaps. As a gust of wind strikes its surface, we feel the heavenly force struggling

against our muscles, and notice how the pull of the earth combined with the coarse nature of the ground are the source of a resistance, preventing us from following the winds to their destination. This force we experience is what allowed man to sail the high seas and reach the most isolated islands found across the terrestrial globe. Let us picture or contemplate the push of the wind upon the sail of a boat, noticing how the celestial vigor has been wielded by man like a tool, since many generations, and how this boat gracefully glides upon the waters to follow the heavenly "spirit."

The thrust of the winds is nonetheless also stored in the earth by the windmills of steel standing upon our hills, disfiguring the bucolic sceneries of the countryside. This vigor of the sky is perhaps what set into motion some of the appliances we used today in our living quarters. We may picture this invisible force being poured into the earth through the work of appropriation performed by our fathers and brethren, with the rotation of gargantuan blades liberating the electric energy concealed within earthly materials. We may proudly contemplate the fruits of the efforts of mankind, dazzled by the observation of these metallic sails unceasingly revolving around the gigantic pillar to which they are attached, recognizing that few other technologies developed by the hand of man have so few disadvantages, and present so few dangers, and we thus forgive their unappealing appearance, standing out from the harmonious scenery of nature.

3.2.4 The Explosive - Breaking with the Air

Looked sufficiently closely, man will not find a clear frontier between the earth and the sky, the ground and the air, the living and the dead. The realms of the creation are seamlessly intertwined one into the other, and their separation is only the fruit of his imagination, necessary because with his limited mind he cannot grasp the continuous, the totality, but rather needs to cut it into things, brought into his world. The oxygen that he breathes is a product of life, the secretion of minuscule living things that turned light into life and air, and in the same manner, parts of the earth may be transformed into warm air and smoke through combustion, and some volatile substances found in the air may suddenly be condensed into solid matter, falling down to the ground, joining the great body of the earth. As man began to discover the blurry nature of this frontier between earth and air, a new step could then be taken on



the race for the appropriation of nature.

It all begins with the work of the ancient investigators of nature, who were often also charlatans, magicians using a genuine knowledge of the earth and the sky to pretend to be master over them and usurp an authority among the naive, the unlearned. They explored the variety of substances found on the earth and discovered that certain of them exhibited peculiar properties. Sulfur, mined in the ground, produced smoke when burned, and it was used for fumigation, among other uses.⁵ Saltpeter⁶ was found to accumulate on the walls of caves, formed by bacteria, and it was discovered that it burned violently and produced abundant smoke when thrown into flames. Sprinkling saltpeter dust into a fire, the investigator of nature may have intrigued his brethren, as it gave the impression that he could control some of the forces of nature. The investigation of such phenomenon thus continued, as it was mixed with various other parts of the earth, observing the results and recording them. In the far-east, a particular combination of substances was found to be the source of a violent ignition, with sparks, bursting flames, and smoke: a precise blend of sulfur, saltpeter, and charcoal dust, which now bears the name of “gunpowder.”

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See the description given by Pliny the Elder in his *Natural History*: Pliny the Elder, *Delphi Complete Works of Pliny the Elder*, 1er edition (Delphi Classics, 2015), n.p (Natural History §35.50) .

6

Salpeter is the mineral form of potassium nitrate (KNO_3).

The very form of the first explosive is a sign of its nature. A powder indeed represents an earthly substance that is destined to enter into contact with a fluid. This particular powder is meant to invite the air filling up the sky to enfold each grain across the entirety of its surface, interacting with it, reacting with it to form something new or be the source of an event. It is a substance characterized by an instability. It waits for a signal, a trigger, to unleash an energy concealed in it, and this trigger is fire. Contact with the faintest spark may initiate a chain reaction setting off the explosion of prodigious quantities of such powder, and cause devastation upon the earth or the world of men.

Once a spark or a flame touches the powder plunged in the air, the chemical cage keeping the energy imprisoned in it collapses. Its structure crumbles, and the energy escapes as fast as it can, in a torrent of heat and gases, expanding around the powder, creating a formidable force that pushes away all things found around it, in all directions. The explosion represents a metamorphosis, a marriage of earth and air blessed with fire, giving birth to an expanding sphere of fiery air endowed with considerable strength, which can push or shatter the earth, extinguish life, or stir up the heavens. Learning to master the use of explosive substances, man thereby appropriates a new aspect of the upper realm, and it allows him to wield air as a tool to act upon the world around him.

Since they represent a use of the air to shape the world, the power of explosives is more apparent when they are used to oppose the earth or life, rather than the sky. The upper realm is indeed already filled with air, and the rapidly expanding sphere caused by an explosion would have few noticeable effects upon it, unless it was of truly gigantic proportions, such as those unleashing the energy deeply buried inside the heaviest atoms. On the other hand, even a modest quantity of the weakest explosive powder can extinguish the lives of numerous people or cause large structures to crumble. The strength of the explosive is revealed when it is offered resistance, by something rigid, contrasting with the ethereal nature of the air. Set ablaze on the bare soil, gunpowder only produced a brief flash and a puff of smoke, but compressed and wrapped in a thick roll of paper, it produced a loud bang as it violently ruptured its paper enclosure with expanding air. Buried in a hole at the heart of a large boulder or in the face of a cliff made of the hardest granite, the explosive can shatter the rock, showing that even a fluid, unseizable substance such as the air filling up the skies can be wielded and used to destroy

the most robust substances found in the earth, demonstration of the remarkable progress of man's appropriation of the earth, life, and the skies.

The name of the first explosive nonetheless indicates the nature of the major use of this substance: gunpowder. As man discovered, the push of the fiery air birthed by the explosive upon earthly objects indeed does not necessarily involve their shattering. This push may be channeled, directed to impart energy and bestow speed to a projectile, which will in turn pierce or shatter another part of the earth or life, considerably more distant than the range of the explosion. The strength of the sphere of fiery air is concentrated on the bullet, transforming the spherical force into a linear one, following the trajectory of the barrel, thereby considerably enhancing its push and allowing the bullet to reach its target.

The emergence of guns, marking an important step in man's appropriation of the air, revolutionized both warfare and hunting. Man wields air to bring the lives of men and animals to an end, watering the dry land with the blood of his brethren and distant cousins, slashing the tree of life and letting its sap cover the earth. Empowered by this new appropriation of the upper realm, a single man can now kill thousands of people with few efforts, just pressing a trigger with his finger and aiming in the right direction, regularly feeding his instrument of death with metallic bullets, made from the flesh of the earth. Man's reach and power are considerably increased by this invention, and it significantly changes the balance of strength between individuals, as the strength of the body largely becomes irrelevant in warfare, and what counts is sighting the enemy, aiming properly, and avoiding the bullets flying throughout the sky.

The weapons wielding the strength of the earth, the sharp blades made of steel, are soon left to rust and be devoured by the lower realm from which they came or are melted to form guns and cannons. The bow becomes a relic of the past, used for entertainment, and enemies now seldom meet on the battlefields, as combat occurs at a distance. This distance also allows man to hunt prey before they can sight him, but his success is so great that when unrestrained, it threatens the very existence of many branches of life, which may be hunted to extinction.

The air is then also weaponized with bombs, explosives encased in metallic shells and placed or dropped from the sky to raze cities and destroy portions of the world. The groups of men possessing a



superior mastery of the power of the air can then prevail over their enemies, reducing them to ashes. This appropriation thus becomes a matter of survival, more than a race for comfort or power. Those incapable of wielding this power efficiently are simply replaced by others who do, thereby slowly shaping mankind as a whole. Empowered to such an extent by explosives, man must begin to learn restraint, to resist using the power he possesses, as a total war between all men may threaten the existence of mankind as a whole.

Inviting light to pass through it freely, undisturbed, the air remains unseen by our eyes as it strikes all the things of the earth enveloped by it. We feel it rushing in and out of our mouth and nostrils, but seldom notice its presence. The sight of the skyline shows us what we often believe to be the frontier between earth and air, but we should remind ourselves that this apparent separation hides the deep entanglement of the realms of the creation. Taking a match with our fingers and striking it on the strip, we are the witnesses of a peculiar event: a flow from the earth to the sky, with solid matter vaporized in the air, as we watch the sparks turn into a flame with a flash and a puff of smoke, with the pungent smell of sulfur penetrating our nose. The whistling of the ignited match is a sign of the expansion of gases released by the substances forming its head. The familiarity of this object may conceal the important nature of the appropriation of air it represents, but we should nonetheless be mindful of the impact that the discovery of such substances had on our branch of the tree of life. We thus focus our attention on the birth and expansion of the first of such small spheres of fiery air,

picturing it as the source of all the subsequent uses man made of it. What we hold with our fingers is the essence of the fireworks illuminating the summer sky, of the firearms protecting us from the rage or greed of vicious men or causing the out-pour of rivers of blood watering the dry land, or of the explosives allowing us to shape the face and the depths of the earth according to our every whim.

The soft whistling and the flash of the match should nonetheless not lead us to forget the extent of the power of the air. This match gave birth to expanding gases, but the expanding sphere did not meet any resistance before fading away, having exhausted its strengths. Lighting a firecracker, we may experience an encounter between earth, fire, and air, with such expanding sphere forcing its way out of a tube made of a part of the earth. Detonating loudly, the explosive rips apart its earthly prison, scattering bits of it all around, in the blink of an eye. We may wonder what may happen to our fingers if they were to be on the path of such fiery wave. Such a small quantity of this substance may be enough to cause irreparable damage to our body, maiming us for the rest of our life. This is the force we wield as a tool since these substances were first discovered by our forebears, a double-edged sword that can save or injure, be used for the elevation of the world or for its destruction. Let us consider this aspect of our appropriation of the air, such a seemingly inoffensive thing, but one that can nonetheless threaten the very foundations of our world.

The use of firearms, spears of air and fire, may nonetheless benefit life as much as death. It offers us a chance to combat a menace to our life or to those we love at a distance, without approaching it, without putting ourselves at risk. Seizing such a weapon with our hand, we may imagine the tremendous power it grants us. It puts us in a position of being able to choose if those in our vicinity will live or die, with only the slightest effort, the mere pulling of a trigger, and only a small risk of failing, a power that most of us would not have without it. This terrifying might has been entrusted to us by men who endeavored to fully appropriate the strength of the air enfolding the earth. Shooting a projectile onto the earth, with utmost precautions, we feel the shock-wave of the explosion pass us through, ringing in our ears, as we watch the bullet fly and penetrate its target, buried into the earth. This shock-wave shaking our bones with a deafening sound was produced by a very small quantity of black powder, visible inside the casing of the bullets. Let us admire the ingenious spirit of the men who discovered that the appropriation of

the air could offer us such an ability, as we muse on whether or not we should be trusted with it.

3.2.5 The Engine - Powering with Air

Water, the liquid of life forming the major part of our body and covering most of the face of the earth, is among the substances naturally found on our planet certainly one of the closest to the skies by its nature, and the air in particular. The transparent substance indeed allows light to pass through it, and it shares with the air its fluidity. As man appropriated the power of fire, he also noticed one of its peculiarities, the fact that liquid water could be turned into vapor, ceasing to be a part of the earth to join the air of the skies, though a prolonged contact with the flames. The flames impart the water with heat, which is a commotion among the smallest bits of matter forming its substance that causes them to be separated from others and be carried away in the air. Man already knew that water vanishes under the sun or is snatched by the winds if left exposed to them, but watching water boil, giving birth to cottony puffs of steam briefly swirling in the air before fading away as they blend with it, he can then better appreciate the nature of this phenomenon. He can feel the scalding heat of the steam, and sealing a pot of boiling liquid, he can see how air pressure is built up by the flames, causing the steam to force its way out, even sometimes leading to an explosion. It nonetheless took a considerable time for man to find a use for this strange property of water,⁷ but it would later lead to a profound transformation of the world, for the better and the worse.

As water is turned into steam, earth into air, a push is created, one that is somewhat similar to the one of the winds. This push can move objects present on the earth, if they stand on its escape path, in the same manner that the explosion of gunpowder can push a projectile out of the barrel of a firearm, giving it the speed necessary for it to pierce its target. Man therefore realized that he could perhaps use this steam push to perform a work, giving him power

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The use of steam to induce movement exploiting its pressure was already known during the first century A.D., as mentioned by Hero of Alexandria, but the rudimentary machines produced at the time had yet to exploit this force to produce a useful work. See: Robert Henry Thurston, *A History of the Growth of the Steam-Engine*. Kegan Paul, Trench, Trubner, 1895: p4-5.



and contributing to the edification of his world, exploiting fire, water, and wood to satisfy his desires.

The exploitation of the push of steam demanded a considerable effort of imagination, explaining why it took so long for man to succeed. The key difficulty is that this push building up inside the vessel containing the heated water is continuous and linear. A projectile could be ejected from the top of this vessel, if both were adequately shaped, but the pressure would be entirely released once the projectile departs from the opening of the vessel. What man needed was a way to exploit the continuous build-up of pressure to turn it into a continuous work, one that could go on as long as steam is produced, without man's intervention. Fortunately, earlier generations already left him numerous inventions in inheritance, offering him solutions to solve this difficulty. The waterwheel teaches that one can transform a linear flow into a circular movement, one that can set into motion a machine running continuously. The water pump shows him the usefulness of pistons and valves, transforming a discontinuous action of the arms into an almost uninterrupted flow of water. A solution is then found, combining different ideas inspired by other machines and adding small contributions to them. A steam-powered water pump is invented and used,⁸ representing the first steam engine, and the first successful appropriation of steam, air, to perform a work. Such engines can nonetheless be used to perform various

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The first steam-powered water-pump was invented by Jerónimo de Ayanz in 1606.

kinds of work. Using coal or wood to heat a water vessel, a continuous flow of steam is produced and channeled to push on a piston, itself connected to a wheel. Once the piston has reached the end of the chamber containing it, a valve releases the steam pressure, causing the piston to fall in its initial position and the wheel to continue to turn. The rotation of the wheel can then be used for any purpose, and its motion can be further transformed, to reduce or increase its speed using gears or to change its direction.

The advent of the steam engine marks an important step in man's appropriation of the air. It considerably strengthens his domination of the earth, as he can now almost effortlessly perform large-scale works on the lower realm as well as in his world, built above it. He can counter the downward pull of the planet and elevate prodigious quantities of water, bringing it anywhere, even to the top of the highest mountains, without breaking his back or straining his muscles. He enslaves water, imprisoning it in cages of steel before boiling it, and he turns it into steam, making it cease to be part of the earth and instead becoming part of the heavens, before releasing it into the great expanse of the skies, joining the clouds. He cuts down forests to feed his beasts of steel. He pillages the depths of the earth for its sooty wealth warming up their translucent blood. The balance of power between earth and man is now irremediably shifted, and the face of the earth begins to change as these new machines are built all over the world.

One of the most important uses of the steam engine nonetheless was not to work to shape the earth and the world, but rather to carry men and things over its surface. Some steamboats reversed the principle of the waterwheel, using steam to cause the rotation of the wheel and the boat to move in the water rather than use the current to turn the wheel. This implies that man can now dispense with the benevolence of the winds to travel across rivers and seas. He no longer needs to put his fate into the ethereal hands of the heavens when undertaking a long sea voyage, as he puts his trust in his own skills and his supply of earthly material needed to feed the fire burning in his engine. He gains further independence from nature, taking what he needs from it, such as coal, without asking for permission, confident in his right and might, building up a world dominating the earth and invading the skies.

Attached to a four-wheeled vehicle, the engine then also allows man to cease to rely on the efforts of animals to transport

things across the roads pervading his land, as he can now exploit the seemingly inexhaustible strength of the earth, dead wood and coal, which unlike animals does not demand times of rest, food, or care. Mankind thus not only grows in independence from the heavenly forces such as the winds, it also becomes more alienated from some other branches of life, which are no longer useful to perform certain kinds of work such as the pulling of carts. Appropriating nature further and further, growing in power, his bonds with it are one by one severed.

The extensive burning of the pillars of the forests and the darkened remains of their distant ancestors buried in the earth nonetheless is not without consequences. The steam liberated in the air once its work is accomplished only has a negligible effect on the skies, but this is not the case with the black smoke released by the furnaces producing this steam. Already burned in great quantities to melt metals when the engine was invented, it contributed to the darkening of the sky of the largest cities of the time, as warm soot was carried into the air, creating a smog suffocating their inhabitants. Disregarding the earth and the sky, man becomes overconfident in the unrestrained expansion of his world and his vision is clouded by his unquenchable thirst for power, coupled with his persistent lack of foresight. His behavior begins to durably affect the whole of nature, upon which his existence still rests. Returned to the air, the essence of the formerly living things forming wood and coal, carbon, may benefit other branches of life, as the living trees themselves rely on its presence in the air for their growth, but it is unequivocally detrimental to the health of men. Witnessing the fall of acid rains corroding his skin, seeing his children coughing because of the pollution of the sky, man is shown that he must rein in his desire for growth, his lust for the expansion of his world, but he will need time to face this fact.

The steam engine was then supplanted by another, one making use of man's mastery of exploding air to push pistons instead of vapor, the combustion engine. Fed with the liquefied remains of ancient forests buried in the depths of the earth, oil, refined into gasoline, this engine has the advantage that it can be made more compact, and demands less care, as its tank of gasoline provide a continuous supply of energy until it is completely empty, contrary to a fire that demands to be fed regularly to maintain a constant level of heat.



The impact of these sophisticated machines, the personal car in particular, is extremely deep. Tarred roads, made of the same cadavers of ancient forms of life that are used as fuel, now cover the entire face of the earth to pave the way for these vehicles, whose speed demand a sleek surface, made by the hands of man rather than fruits of nature. The isolation of remote villages and communities is broken, but often so is their cohesion, as men can drive away to see the people they want to spend time with, and they neglect their neighbors. Easily carried to the farthest parts of a land, things are made and traded with fewer efforts, and man accumulates more things than ever, first merely becoming attached to them, but then being possessed by them, always wanting more. The range of his existence is considerably larger than the one of his ancestors, as he can travel in mere days to places that would have taken weeks or months to reach by foot or on the back of a horse. One may marvel at the fact that this revolution that profoundly affected the earth, life, and even the sky came as a consequence of a seemingly trivial event, the appropriation of the push produced by water turned into air by fire.

From dawn to dusk, the fiery orb circling through the sky shines upon the dry land, allowing life to take roots in the ground. Its luminous rays separate the smallest droplets of water found upon the surface of the seas and take them up in the air, where they are promptly snatched up by the celestial currents and carried to the clouds, before these are emptied, forming the rains alleviating the thirst of the earth. Water is turned into air by the heavenly fire and

made to perform a work benefiting life. Having mastered the use of fire, here on earth, we also are endowed with this might. Filling a vessel with the transparent liquid of life, bringing it over a flame, we soon enjoy the sight of seeing it simmer, with hints of steam liberated by the heat, before it begins to boil. Then, we see this part of the earth become part of the skies, water turned into vapor, like a veil of the thinnest white silk elegantly balanced by the air, slowly becoming one with it as it fades away. We may observe the rising of the vapor and, attempting to seal the vessel shut with a lid, we may notice the pressure building up inside it as we feel the lid and the hand holding it being pushed up by the steam. This is the force that initiated the industrial revolution, the power whose appropriation caused an extensive transformation of our world, for the better and the worse. Let us wonder at its simplicity, and let us appreciate the subtle role played by fire in it, this chain reaction turning remnants of past forms of life into heat and light.

Strolling on the boulevards of a city, we will probably not see any steam-powered vehicle, but we have better chances of hearing the roar of one using "gasoline," the distilled remains of our distant cousins reclaimed by the soil, mixed with air to trigger explosions, with blazing air expanding and causing the wheels of the chariots of steel to rotate, setting it in motion. We may now attentively listen to this familiar sound, attempting to discern the beating of the pistons. What slips into our ears is the pressure waves they stir up in the air around the engine, the power of the inflammable material extirpated from the shadowy depths of the earth, once forming limbs of the great body of life. We may marvel at the way this invention radically transformed our world, at how large the place offered to these vehicles pervading our cities is. The men around us no longer need to walk or ride a horse to reach distant villages, as their movements are powered by the burning remnants of their most remote ancestors and cousins, whose graves were mindlessly pillaged by our brethren to offer us a chance to spare our efforts and our strengths. We may nonetheless appreciate how this subjugation of the air benefited our lives and how it will continue to do so, as we watch the things we need to survive being effortlessly carried in such vehicles to their destinations. The food we buy, the pieces of furniture whereon we sit, or the myriad of devices making our life more comfortable than the one of our forefathers, were all brought to us through the wielding of the power of the air. We may therefore admire those who labored to create them, sparing no efforts to allow

us to spare our own.

Fortunately, we now live in a time when the reliance on the wealth of the earth to build up our world may be fading. The noxious fumes released by the engines fed on the sooty remains of life, obscuring the sky and the walls of our cities, poisoning our lungs, are slowly being blown away by the wind of change, as engines powered by the harnessing of currents of air and water or the radiance of the daystar become increasingly present. The subservience of the air, making it labor for mankind, using steam and combustion engines, was an important step in the race for the appropriation of nature, but we may acknowledge the fact that this power should now be relinquished, as we behold the detrimental impact it has upon our world as well as upon nature. Wielding the strength stored in the earth, as fluxes of electrons, to replace the machines that fed on the liquefied ruins of the most ancient forests to create and move things across our world, we may realize that mankind made a step in the right direction. We nonetheless also contemplate what is to be done so that we would cease our brutal assaults upon the skies and refrain from savagely plundering the irreplaceable wealth of the earth. Watching the clear, azure sky, filling our lungs with fresh air carrying the delicate fragrance of various flowers, we are fully aware of the extent of our dependency on the upper realm and shall swear to amend our ways, expressing our gratitude for our mere existence.

3.2.6 The Acoustical Recording -Hearing through the Sky

As early land animals wandered through the dry land in search of food or a mate and adapted themselves to their new environment, generation after generation, they learned to perceive some of the waves propagating in the earth and the air, resonating in their bones, allowing them to detect the presence of large predators. In some of these creatures, several bones of their jaw ultimately started to form a structure that evolved to specifically detect minute changes of air pressure, feeble waves carried by the air: ears. As a reaction to the emergence of this new sense, many animals also evolved a capacity to generate such waves, with loud shouts or faint whispers becoming vectors of emotions, such as anger, fear, or joy. Life thus learned to appropriate the air to carry meaning and feelings, long before man learned to do so by the work of his hands and his mind rather than with what life has given him. The standing creature would

nonetheless later employ its innate talents to improve on what nature discovered, pushing the limits of this appropriation.

Man noticed how sound waves, if powerful enough, could cause light objects such as thin sheets made of metal or paper to vibrate in unison with these waves, taken in their rises and falls, as his eardrums do. Attaching a needle to this vibrating surface, whose tip is placed on a rotating roll of wax, a groove mirroring the properties of the sound waves propagated around the device is cut. A sound recording is thereby created. When the roll of wax is then rotated and the needle follows the path of the groove, it causes another flat surface attached to it to vibrate, stirring up a new wave in the air, one very similar to the one whose imprint was left on the wax. Sound can now not only be recorded, it can also be played back.

First powered by hand, the phonograph was then refined and powered by a force stored inside the earth, electricity. The wax cylinder then became a vinyl disk, easier to reproduce in great quantities, and then one of plastic read by lasers reading invisible series of numbers representing series of soundwaves, with this support ultimately disappearing, leaving only the series of numbers stored on various forms of memory chips. The recording and playback devices have been considerably refined, but the way by which they allow man to appropriate a new dimension of the air has not significantly changed since the invention of the first phonograph.

Air waves can now be captured and released at will. The air has always left imprints on the earth, as the winds unceasingly caressed its face, patiently and delicately carving the soil across the ages, but now these imprints can also be used to resurrect the wave that gave birth to them, making it resound in man's ears and in the whole of the sky. These imprints are entrusted to the earth, which will store them safely, longer than the lifetime of any man or animal, and they become things of the world, reproduced, sold and bought, collected, and possessed. This considerably changes man's relationship with sounds, these invisible waves carried by air, loaded with information and sometimes meaning, the trigger of cascades of emotions when they are heard. Sounds are indeed fundamentally transient, reflecting their celestial nature, as they quickly fade away once they are produced. The advent of the phonograph, allowing the recording and play-back of sounds, nonetheless disturbs this transient nature. Any sound can now not only continue to exist, durably preserved in the earth, but it can also be repeated at will, any number of times.



Sounds become potentially timeless, acquiring an earthly nature as they are stored in earthly matter. It ceases to be tied to a certain event, a precise point in time during which it was created, and it ceases to be associated with a particular place on the surface of the earth as well, as recordings can be sent to every part of the planet and played there.

Capturing and reproducing sound waves, man thus appropriates a new dimension of the air filling up the sky. From now on, it is not only the words uttered by any man that can echo through eternity, but also all the sounds of nature, the roar of thunder, the gentle burble of rivers running to the sea, or the songs, shouts, and noises produced by any branch of life. These sounds all become part of his world, analyzed, collected, and possessed. Coupled with the power of electricity, the recording device then not only engraves sounds into the earth for preservation. The microphones become extensions of the ears, as they can perceive the faintest wave in great detail, inaudible to man, and on the other hand, the speaker can amplify a sound, stirring up giant waves reaching the horizon from the most feeble whisper, allowing enormous groups of men to share an experience as they hear a piece of music or the voice of a single person together.

Coupled with electricity, the recording and play-back device then gave birth to the telephone. Functioning on the same principle, the telephone does not transform the sound wave into a groove in the earth but rather produces a wave of electrical tension mirroring the one of the sound, which is then transformed back into a sound wave when it has reached its recipients. Wielding earth and

air as tools, man thus further extends the reach of his voice and of his ears, not only by listening or creating cylinders or disks that can be sent to remote lands, but also by speaking and listening in real-time, with voices and sounds carried in copper wires, and then also as radio waves.

Once again, the world appears to become smaller as it gets fuller as the result of man's work of appropriation of nature. Man can hear and talk with his brethren living on the other side of the planet, and combined with the equivalent appropriation of light, images and sounds can be combined to allow man to appear present anywhere on earth or even in the highest sky, instantaneously conversing with anyone. This power is nonetheless not without its dangers, as the mirage of presence offered by such technology may cause him to cease from seeking to meet the people sharing with him the part of the earth he calls home. As sophisticated as it is, this technology deprives man of several dimensions of his experience of the world. He cannot touch, smell, or taste through these machines. He cannot pass on the gift of life without earthly contact, and thus by taking refuge in the heights of the world, far from the materiality of the earth, he condemns himself to an inferior experience of being.

Perhaps even more insidious than conversations mediated by machines are recordings. The easier they become to create, the larger the number of them that are flooding man's world. Spending his days listening to music to soothe his anxiety in the face of terrifying silence, listening attentively to fictional tales or stories from the lives of other men, he may even convince himself that he does not need to interact with others using his voice and his ears, as he can possess more recordings than he could listen in a lifetime. Trapped by his desire to control and possess, he may forget the preciousness of his embodied experience of the earth, life, and the skies, an experience that his body craves, and that is often degraded by the mediation provided by technological means. This does not deny their value and their usefulness, but man should remain alert, and conscious of these traps of the mind. Then only will his remarkable appropriation of nature serve the appropriation of his own being.

Leaving the quietude of our comfy lair and venturing outside, plunging ourselves in the open air, letting it engulf our limbs, slipping into the depths of our nostrils, a multitude of waves crash into our ears, like those of the sea reaching the shore. Invisible to our eyes,

these tremors cause our eardrums to vibrate in unison with them, triggering a cascade of impulses on the wiry nerves attached to it, sent to the depths of our brain, where they mysteriously become a flow of sounds echoing through our mind. These undulations bring us the noises of man's world, the hustle and bustle of a city, with the deafening roar of engines blended with the voices of a variety of people, married with the clacking of heels hitting the pavement. They may also offer us the delightful tunes of nature, the timid voice of the sparrow or the soft cooing of the pigeon, together with the whisper of the leaves conversing with the breeze. Let us grow aware of the presence of these unseen tremors, inconspicuously propagating through the air before reaching our ears. Most are vivid signs loudly proclaiming the presence of things belonging to nature or to our world, but the subjugation of the air by our branch of life nonetheless now allows the possibility that these sounds may be a mere recollection of events or things that no longer exist. Paying attention to this flow reaching our ears, we attempt to discern those that are mere reproductions of past utterances or performances, the voices and sounds stored by man inside the earth before being gloriously resurrected as waves traveling through the air.

Turning the unseen undulations of the air into traces etched on the earth, man has found a remedy to the fleeting nature of sounds, a way to allow them to continue resonating through the sky for as long as the marks left upon the earth remain. Our world is now filled to the brim with such signs, brought back to the sky at will through the vibration of the thin membranes of speakers. Let us try to find the most ancient trace left by a voice upon the earth. Attentively listening to this piece of our history of the conquest of the air, we may imagine the place and the time during which it was carved into the earth. Created by men living in a world significantly differing from ours, they nonetheless shared with us their capacity to speak and hear in the same way as we do now. This recording represents a bond woven between us and them, one that extends through both time and space, and even transcends death, as all the men who lived when it was made have now been devoured by the earth or been scattered to the four winds. Let us enjoy the precious chance offered to us by these men: to share an experience with them, listening to what they told us and what they heard, as we hear it now, as their voice once again travels through the sky, resurrected, unearthed and thrown into the sky, vivaciously undulating in the celestial aether.

Thinking about the sum of recordings we possess, in any form,

we may take a moment to examine their value, and our attachment to them. Our most cherished songs, those evoking the most intense memories of our lives, or the words of men we deeply admire and look up to for wisdom or mere entertainment, they are parts of our world, fashioned by men who wanted to leave an indelible trace upon it, and often also etch a mark in the heart of their audience. Conscious of the value of what we have received, how we have benefited from the strenuous labor of several generations of men who have built this mountain of sounds at the center of our world, we may also reflect on what contribution could we make to it. Preparing a recording device, readying ourselves to carve a part of the earth with our voice, let us try to find words, elegant and meaningful, that may be worthy of being preserved, words that may remain present upon the earth long after our death, and reach the ears of future generations, children having yet to see the light of day. What shall we say to them? Playing back these words, we may also enjoy the experience of hearing our own voice, as others hear us rather than how we usually hear ourselves, an experience that would not have been possible without our ancestors' remarkable work of appropriation of the air.

3.2.7 The Flying Machine - Through the Air, Away from Earth

From the shallows of the sea, where they waddled through the mud with their elongated fins, our distant ancestors strenuously crawled onto the dry land, letting their fins slowly turn into legs after countless generations. No longer immersed inside the great body of the sea, but rather plunged in the air filling up the lower skies, they now experience the smothering embrace of the lower realm, feeling the downward pull of the earth keeping them close to its surface, preventing them from venturing into the ethereal heights above it. Having already ascended from sea to land, and beholding the creatures graciously flying through the air by beating their wings, man nonetheless heard the call of the skies, and he seems to always have craved the unsettling freedom offered by the vast expanse of air found above his world.

Life having denied him wings, man is thus forced to use his fertile imagination and his agile hands to find substitutes, extensions of his body allowing him to counter the pull of the earth and liberate himself from it. Attempting to imitate life, he first constructed wings of wood or fabric, but soon realized that he lacked muscles powerful

enough to push the air under them enough for him to depart from the ground. Recognizing that he faced a dead end, he began to search for another way. Some already had noticed how the air above a fire, heated by the flames, rose in the sky, carrying ashes, and small embers just high enough for them to be cooled by the breeze and then return to the earth. At this point having yet to understand the finer details of the nature of air, man nonetheless learned a simple fact: hot air rises! Equipped with this simple and yet precious nugget of knowledge, he decided to trap heated air, preventing its mingling with the rest of the sky. He attached a small lamp to this trap to allow the air to remain hot and saw that this contraption could rise up high in the air, floating in the sky, using only a small flame to power its journey. Such “sky lantern” marked a first step toward the appropriation of flight in the air, a step taken during the Antiquity, but that would remain only a mere curiosity for many centuries.

Man cannot, by his own strengths, escape the omnipresent pull of the earth. Unable to use brute strength, he must thus use a trick against the lower realm. He cannot make himself lighter, reducing the grip of the earth upon him, but there is another way: he can make a mass of air more voluminous by imparting it heat, making it lighter in volume, and as this lighter air rises, he can then harness its force to counter the downward pull of the earth. Heat is indeed a commotion at the scale of the elements forming matter, found in both the earth and the air, and it causes these bits of matter to collide with one another, pushing each other away and thus occupying a greater portion of space. Man can therefore find an ally in fire and the air, against the earth. He must only learn to better understand the fluid filling up the heavens.

The heat imparted to the air by the flame quickly fades away, as the commotion characterizing it spreads to the air around it, even when enclosed in a trap. Getting hotter than what is around, the air rises, and if it gets colder, it remains still or descends. The fire heating the air must therefore be precisely controlled if one intends to exploit its power to imitate the birds and conquer the lower skies. Experiments are then made. An extremely large trap is patiently crafted, sewing a great number of pieces of fabric to form a giant balloon, with an opening just large enough to allow a naked flame to give the air inside it warmth without burning its fragile envelope. Knowing that the larger the balloon, the greater its upward pull will be, the investigator of nature thus determines the weight of the load it can extract from the downward pull of the earth, and attaches a



gondola to it, which can carry passengers. Lacking confidence in his knowledge of the air, the inventors of the first hot-air balloon⁹ did not dare to be the first to experience flight. This honor was first offered to animals, with the balloon tethered to the earth, showing that although man yearns to depart from the earth, he remains afraid of severing his bond with it. Given courage by the success of other land creatures that rose in the air without being harmed by this experience, a man then made a first tethered flight, before finally letting go of his fear and boldly wielding fire to control the rise and fall of the balloon, traveling above the face of the earth rather than over it.

Imprisoning air, applying a flame to it, man thus begins to appropriate the heights of the sky. For the first time, he can behold his world from above, like the birds have since they first conquered the skies, without any tether, floating freely in the air, carried effortlessly by the winds. Unable to steer the course of the balloon, the navigator must put his entire trust in these gusts of air, as they can take him wherever they please. The extinction of the flames allows him to descend and return to the earth, while their rekindling allows him to ascend and reach higher parts of the heavens. He can choose either the sky or the earth but has no power over which part of the two realms will he be brought to by the currents reigning in the heights. Fire and still air take man up, but the cold winds sweeping

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The inventors of the first hot-air balloon were Joseph-Michel and Jacques-Étienne Montgolfier (1783).



the land are what carry him away, with only a whisper heard. This trust nonetheless allows him to travel comfortably and effortlessly over the earth, as all the obstacles previously found on his way can now be bypassed, flying over the world.

Man nonetheless has little tolerance for lacks of control. His appetite for power is rarely satisfied, and the taste of the freedom brought on by the conquest of the sky with the hot-air balloon only incites him to find a better way to exert his power over the heavens. He thus continues his investigation of the upper realm, also using the fruits of his appropriation of the earth for the completion of this task. Seeing that the earth was successfully tricked by the use of hot air to counter its downward pull, he intended to discover another, one that would offer him more control over his destination while flying. In all likelihood inspired by the birds elegantly gliding in the air above his world during days when vigorous winds blew over his land, he noticed that the creature did not need to beat its wings to maintain itself high in the air. Facing a strong current of air and letting it pass over and under its wide-open wings, the bird can be lifted by it, simply slightly inclining his wings upward, using the force of the current rather than its own muscles to soar to the heights. Man understood that he could create a winged vehicle that would not need to beat these wings to depart from the earth if he could only plunge it in a sufficiently strong current of air. Considering the heaviness of his body and the one of the flying vehicle, he knew he could not simply wait for tempests to perhaps provide enough wind to lift his machine up in the air, without causing him to subsequently violently crash down to the earth. Fortunately, another means of appropriation of

the air would provide a solution: the engine.

If the winds are not strong enough to lift up man's machine, this machine may use the strength of the earth and life, the liquefied remains of ancient forms of life stored in the ground we call oil, to reach the necessary speed. Using an explosion engine and a propeller, based on the same principle as the windmill but only reversed to stir up wind instead of harnessing its power, the machine propels itself on the earth, until it reaches the speed where the flow of air running above and under the wings is strong enough to support them. Then, by slightly inclining the wings upward, the machine leaves the ground and begins its ascent in the air, freed from the pull of the earth as long as the engine does its work.

The first plane marks another step in man's appropriation of the air, as he can now reach almost any part of the earth in a few days at most, avoiding the dangers of the land and the seas, flying among the birds, contemplating the clouds from above, isolated from the harshness of the higher skies by windows made of glass and a shell made of sheet metal. He can now move through the heights and use the upper realm to reach new parts of the earth, but he is not a bird, and his flesh is ill-adapted to these heights. He would not survive the coldness of the air blowing beyond the windows of his vehicle, and neither would his skin bear the intense flow of light hitting the shell of his flying machine. He will not build castles in the sky using such tricks, and a prolonged departure from the earth may remind him how much he belongs down there. His very vehicle made to appropriate the heights is made as an imitation of the earth, with a flat, rigid ground offering stability and support, seats like the ones found everywhere on the earth, and windows offering a sight of the upper realm. Man may have set foot in the sky, but he has yet to take roots in it, something that would demand a radical overhaul of his own nature.

As a consequence of this invention, man can transcend certain limits that were in the past imposed on his kind by the heavens. He can now flee the sunrise by flying toward the west or the sunset by flying eastward. He can watch the sun stand still, following the rotation of the earth. Furthermore, he can now with his own eyes observe the curvature of the earth, better than on the summit of the highest mountain, witnessing its spherical nature, inviting him to wonder about the nature of the pull of the earth keeping all these things together. Appropriated to such an extent by man, the skies



lose some of their mystery, but this loss kindles man's lust for further conquests. Being master of the lower skies, he now sets his eyes upon its depths, the darkness of the cosmos, the place where things are completely free of the smothering embrace of the earth.

The propeller of the first planes pulls them up by creating a current of air, and thus they cannot function without the fluid filling up the lower skies. Reaching a certain height, the air becomes rarer and then disappears, giving way to an emptiness pierced by rays of light. Wanting to reach this expanse beyond the air, man must thus cease to rely on the air of the skies, and instead produce an equivalent. This may represent the ultimate form of appropriation of the air, as he makes use of earthly substances that react violently with fire but can nonetheless be controlled, spewing jets of fiery gases and thereby creating a push with an intense current of air. Mastering this technique, man no longer needs the winds to escape the pull of the earth. He can ascend straight to the depths of the skies with giant rockets generating their own wind, their own push, using the strength of the earth to conquer the highest skies.

This new step for mankind is particularly significant. Not because it demonstrates our intelligence or the extent of our appropriation of the earth, life, and the skies, but rather because it marks a form of adulthood of life, a moment when life can potentially begin to sever itself from the environment that has given birth to it. From the sea to the dry land and then to the air, man is the first branch of life to cross the frontier of the air to reach the great emptiness beyond it. He has now set foot on the smaller luminary, and the great one has been approached by his mechanical envoys. He has

sent probes to distant planets and seen them in great detail. Man weans himself from mother earth, and he seeks to plant the seeds of new trees of life in the confines of the universe. For now, he nonetheless still needs to be fed with the milk of the earth, life, and the air, as the great celestial emptiness is devoid of the things life needs in order for its fire to continue burning. If he wants to cease to be an earthly one and become a heavenly being, he will have to continue his efforts and find ways to produce the conditions necessary to sustain life indefinitely, without relying on his home planet. Before he discovers this, he may nonetheless ponder the necessity of such severance.

Rare are the places on earth where traces of the hand of man are nowhere to be seen. Life has risen from the ocean and patiently covered the dry land with a blanket of jade, and then man drew countless stripes with black tar and gray concrete upon this living, vividly-colored artwork. Erecting skyscrapers and constructing machines venturing into every corner of the earth, the ambition of our branch of life seems to be boundless. Looking up at the cerulean dome above our heads, we can see that the heavens have not been spared by our fathers and brethren. Planes leave their cottony trail among the clouds, as they pass through the currents enveloping our lands. Using the liquefied remains of ancient forests and old creatures, the oil we extract from the ground, these flying machines are the source of a lift allowing them to free themselves from the omnipresent downward pull of the earth. We may marvel at the prodigious efforts that the creation of these machines has demanded, with legions of men toiling together to overcome the smothering embrace of the earth and conquer the ethereal heights of the atmosphere. We may now let our minds wonder about the destination of these planes, asking ourselves how different the world over there is compared to the one wherein we presently stand.

Closer to our eyes, we now observe the branches of life that have evolved an ability to vagabond freely through the air, most birds and many insects. How effortlessly and gracefully do they liberate themselves from the comforting and yet oppressive pull of our planet, with their small stature allowing them to be less subject to its ubiquitous force. They swiftly swim in the sky with their lightweight wings, pushing the aether down below, offering it to the earth to appease the lust for possession of all things bewitching the

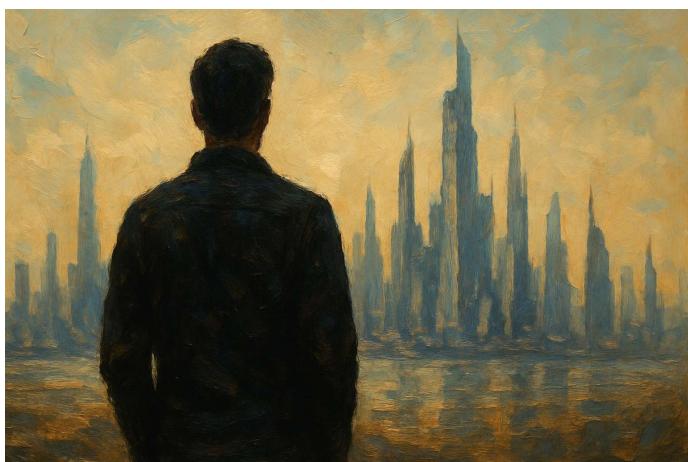
lower realm, as it keeps all material things close to its face. Watching our arms, we may notice the resemblance between our limbs and their wings, and may imagine ourselves soaring through the clouds using the strength of our arms, feeling the incomparable freedom that these thoughts convey in our flesh, our mind relaxed as we savor the sweetness of such a pleasant dream.

Mankind has nonetheless succeeded in claiming the highest sky as its own possession, building for itself what nature had denied our species. Wielding earth and sky as easily as the first tools made by the hands of our forefathers, we no longer allow the heavenly forces to impede our yearning for discovery, our lust for domination over nature. We no longer care about the winds filling up the lower skies, as we can produce our own. We take what we want from the earth, pillaging the graves of our distant cousins to feed the machines liberating us from the tyrannical pull of the earth by stirring up new winds, made of earth and flames. Watching the two great luminaries of the sky, the planets revolving around our radiant star, we may muse on the fact that these celestial bodies are now within our reach. We have sent objects to them, made with our own hands, and they now fully belong to our world, which is continuously expanding as our power unceasingly grows. Observing the starry sky, we may think about the future of life, and the possibility that our remote descendants will one day look at the earth, our home, as we look at these distant stars now. A forest of life may one day be planted across entire galaxies, with new trees of life growing in new earths, enveloped with new skies, with all this possible because of our inflexible obstinacy to subjugate nature, to make the skies our own possession. The work of men can be terrifying, and their race for the appropriation of the earth, life, and the skies often threatens to enslave them, but the ascent of man, from the sea to the sky, nonetheless seems like a worthy endeavor for life. Let us contemplate the astonishing progress of our branch of life in this regard, with a certain pride, but without ignoring the potential dangers tied to our insatiable ambitions.

Chapter 4

Appropriating the World

The world stands in contrast with nature, with the unfathomable whole formed by all that *is*. It nonetheless includes this whole, as it represents the set of all the things perceived and conceived by the human mind. The world is foremost the way man looks at the whole, cutting it out in a multitude of little pieces grasped by his mind, turned into “things” that are delimited, and can be referred to by a name, within language. It is the multi-faceted lens through which we behold the earth, life, the skies, and the world itself, as an assembly of things arbitrarily named, and whose boundaries are equally subjective. The world is first a meta-physical space in which language and reason arose when mankind was a young shoot of the tree of life. Each concept we think of, each word we utter, represents a thing of the world, part of this space shared by men,



and only them. The growth of man's world certainly was a decisive factor leading men to begin to run the race for the appropriation of nature, as it allowed them to perceive their surrounding as materials that could be used to create new things and edify their world further.

Filling up the meta-physical space opened up by the gigantic web of nerves present in our body with concepts and words, men then used these immaterial things to transform their lives on the earth. A flow appeared, running from the meta-physical toward the physical, from the world to the earth, and these men began to shape the earth and life according to what was envisioned in their mind. The world then ceased to merely be a broken image of the whole of nature, a mosaic of the earth, life, and the skies, and it began to be incarnated upon the earth, as a mass of things made by their hands, objects made of stone or bone, earth or life, such as tools, buildings, machines, or roads. Products of the mind of man, these things have transformed the face of the earth, the tree of life, and the air of the skies. The traces of man's hands are now found all over nature. This realm is the home of mankind, just as the earth is the home of life as a whole. It combines the material with the immaterial, forming a gathering of all the things produced by the mind of our branch of life, including the marks we leave upon nature as well as the fruits of our reflection and imagination, the signs and the words with which we manipulate with our reason, without using our senses.

Language is now the foundation of our world, and using this tool of the world, man has built great things that transformed his mind as well as his environment and his life. Assembling words into large structures, letting their power be reverberated throughout the earth, life, and the skies, through the agency of men using these words as guidelines to edify their world, they created civilization, with institutions like governments and states being creation of their mind but whose influence is considerable upon the material realms, with cities and countries being built upon the earth, elevating man's world into the skies, according to a purely meta-physical, worldly vision.

The birth of man's world, together with the freeing of his hands, are the events that triggered the race for the appropriation of nature. The world has itself been a subject of appropriation by its participants, with the meta-physical space opened up by reason and language being intensely exploited to improve the appropriation of

other realms, and to build up civilization, the world incarnated upon the earth. Growing uncontrollably following the frenzy of production of things by the runners of the race, the world would nonetheless ultimately present dangers to man, as the walls of things he built slowly become a prison enclosing him, imprisoning him, severing him from the truth of nature behind them. Probably the most powerful of all the tools wielded by man, the power of signs and language is a double-edged sword, one that can be used to enslave or to liberate. To break out of these walls of things, one must nonetheless first clearly see their nature.

4.1 Appropriating Signs

4.1.1 The Isolated Sign - Representations in the World

All over the dry land standing out of the oceans formed by the precious liquid of which the greater part of our bodies is made, myriads of emerald beings patiently harvest the brilliance descending from the sky, like a downpour of gold offered to the living. They dance with the winds and the rains, accepting their passive role in the play of nature, without awareness of their surroundings but nonetheless diligently performing their work, upon which our existence entirely depends. They occupy a place in our world, but they do not live in a world of their own. They only exist in the unicity of all that *is*, without perception, without things, but rather only rudimentary reactions, laboriously selected by life through eons of evolution. The animal branch of the tree of life, to which we belong, significantly differs from these impassive and yet marvelous light-workers.

Animals are endowed with means of perceiving their surroundings with far greater detail. They not only can detect the presence or absence of light or earthly substances but can also distinguish things as parts of the whole of the creation. This seemingly trivial faculty nonetheless represents a crucial leap in the growth of the tree of life. This event shattered the oneness of the whole and threw the animals into a world of their own, one that could be perceived as a whole, but also as a set of “things” standing out from the whole, and standing in contrast with other “things.” The world of the first animals, living in the ocean, was then cleaved in successive steps. The expanse of translucent, liquid water was distinguished from the opaque, muddy ocean floor. The tumultuous seas were split from the majestic earth, and then, as the eyes of some of them timidly opened, the glorious sky appeared inside their world. A great variety of living things emerged from the darkness, revealed by the minuscule, luminous envoys of the sun. A great diversity of growls, shouts, and cries started to break the silence that reigned over the earth since the infancy of the heavens. A wide array of textures began to be felt, and an assortment of fragrances started to fill up the air of the sky and the water of the oceans. Life itself stood out of death, causing the emergence of the great game played by predators and prey, with living things easily distinguished from the rocky earth



or the cottony clouds. Thus was the universe turned into a world, with the animals as its architects, not creating its content but rather cutting it into a gigantic, dynamic puzzle, bestowing to each part an individuality, allowing them to be perceived in contrast with others and with the whole. The significance of this event in the (hi)story of life can hardly be overstated. Another event would nonetheless represent another crucial milestone in the growth of the tree of life: the birth of signs in the world.

As the mesh of nerves pervading some shoots of the animal branch of life grew in complexity and efficiency, these living beings evolved the ability to do more than merely draw the contour of things. Through a patient but ruthless selection, life learned that this web of nerves could also be used to establish links between things, connecting things in the world, even though they may be distant or appear unrelated on the earth, in the seas, or in the sky. The things grasped by their senses in the earthly or heavenly realms can be associated with others, in their world, in their mind, whose presence is not necessarily perceived by the senses. The thundering roar of a lion, echoing through the emptiness of the Savannah, falls into the ears of the birds singing while perched on high branches as well as in those of the squeaking mice hidden in their burrows in the entrails of the earth. Endowed with an ever-changing web of nerves inside their skull, constantly adapting themselves to respond

to the endless flow of stimuli poured in by the senses, they learn to associate this sound with danger, with the presence of a threat to their existence, as those that fail to learn are slowly winnowed out of life by the sharp teeth of the majestic beast. Some living things begin to associate the bright, crimson shade of blood with the presence of a carcass, ready to be feasted upon, or a wounded creature that will soon depart from life, while others learn to link the imprint of paws left in the damp soil with the presence of friends or foe in the play of love and war. This second important event marks the birth of signs in the world of the animals.

A sign is a bond between things of the world. It connects a thing acting as a signifier, something that is recognized by the senses or the mind, with another acting as a signified, something whose presence is brought on or evoked in our mind by the recognition of the signifier. The crimson shade of blood can act as a signifier for the idea of danger, or simply evoke the memories of violent encounters with fierce beasts or men, when blood was spilled profusely, and lives were returned to death. The flapping of the wings of a flock of birds, penetrating the ears of other animals and entering their world through the doorway of the senses, may also be recognized as a sign of the arrival of a threat. Such signs emerged in the animal world through a rigorous and long-lasting natural selection, result of the play of love and war. These things of the world were themselves patiently refined through the ages, evolving from rudimentary signals marking the presence of food or danger into sophisticated signs accompanying the creatures during most parts of their existence, playing a major role in the play of love and war, the driving force of the growth of the tree of life as a whole. Ants evolved a rich variety of signs expressed with a palette of substances dexterously woven by life itself to mark their belonging to a group, to draw a path on the earth to find their way toward a source of nourishment. The bees created subtle dances to point out directions in the sky where fields of flowers rich in nectar can be found, dances that are witnessed by their peers and accurately interpreted, as they see the signified location beyond the signifier, the movements of the dance itself. The melodious song of the swallow is heard equally by all animals and perceived as a sign of the presence of members of their branch of life, but to the swallows it may also be heard as having a deeper signification, being a mating call, a cry for help, or perhaps even an expression of merriment.

Like a field of crystals slowly growing, with countless invisible

pieces falling right into place to form an elegant, well-ordered structure out of the chaotic work of the skies, the world of the animals patiently grew more refined and intricate, with new signs continuously emerging, superseding others that are falling into oblivion. Meaning soon pervades this world. A sea of signifiers is tied by an immaterial web to a forest of signifieds, with new bonds unceasingly being woven and unraveled. This landscape of signs forming an important part of the animal world can contain wonders of complexity and magnificence, but they remain pure products of the play of love and war, the fruit of the work of the skies upon life, with the exquisite preserved while the inept vanishes. Most animals have no awareness of the role played by these signs in their lives, and they receive them as a gift of life, having played no part in their conception or inception. One small shoot of the tree of life would nonetheless one day profoundly and irremediably disturb this natural order of the world inhabited by the animals: man.

Standing upright, his body pointing toward the highest heavens, as if signaling a desire to escape the earthly nature of life, and feasting on the nutritious flesh of other animals, man soon finds the means to sustain a considerable growth and the refinement of the web of nerves that sustains his world and allows him to perceive the earth, life, and the skies. The extreme acuteness of this perception, allied with agile hands now relieved of the burden of supporting the body and flexible, elongated fingers able to move independently, or a face pervaded by an array of fine muscles allowing a wide palette of facial expressions, makes man more than a living thing able to read the signs of nature, those devised by life itself through a meticulous selection. The range of signs he can use is not limited to those bestowed upon him by his forebears, through the nature of his own body, engraved on the web of nerves pervading his body. He can now create signs according to his inspiration, learning to weave the bonds connecting the earth, life, and the skies with his own world, the way the whole is divided up into a multitude of things, and a profusion of signs. Contrary to the nightingale, he can compose a new song every night and sing his creations at the break of dawn each passing day. In contrast with the diligent bees endlessly repeating the dance taught to them by life itself, he can decide to willingly explore the possibilities offered by his limbs and attune his movements to peculiar aspects of his world, becoming the source of dances never seen before, endowed with a meaning that is the fruit of his imagination. The sign, part of the world of all animals since time immemorial, is



now not only being used, but also being appropriated by our species.

As the fine web of nerves inside man's skull is refined, he begins to see increasingly clearly the bonds between the things forming his world. His eyes pierce through the appearances of the earth, life, and the skies, and discern the underlying significance that these things may have, seeing more than a wall made of various signifiers assembled to form structures, but rather seeing some of them as portals toward other things, windows through which distant parts of the world may be contemplated. Looking at the traces of paws inside the mud, he sees the animal to which they belong. This nascent consciousness of the nature of signs ignites a desire within his heart. Reading the signs of nature with ease, he realizes that he can manipulate signifiers and even create them. Coating his skin with a layer of crimson ochre powder mixed with water, he can paint his skin with a bloody shade, inspiring awe and fear in the eyes of his brethren. The work of his hands and his imagination can transform his body into a living sign, causing other men to see him as a signifier evoking danger, violence, blood, and death. This use of the pigment offered to him by the earth is but one of the most rudimentary signs appropriated by our kind, one rooted in nature itself, as the link between this color and death finds its origin in the nature of blood itself and the role it plays in the survival of blooded animals, but man can also create signs in a totally arbitrary manner, choosing anything as a signifier that can signify anything else, and this is what makes his use of signs so much more powerful than the one of any other creature.

Man appropriates the world in which he was thrown at birth by

weaving new bonds between things, transforming this web of bonds as he pleases, sharing his creations with other members of his branch of life. He can pile up pebbles upon the grave of a loved one in a particular way to mark the significance of this part of the earth, and as others recognized the signification of this monument, this precise pattern by which earthly objects are arrayed may become a signifier designating a grave among those dwelling in this land, and their descendants, marking the birth of a sign that will live on in the mind of men as well as be seen over the face of the earth. Furthermore, what he can do with the earth, he can do with his own body. He can appropriate the earth and turn it into signifiers for any signifieds, but his own flesh may also be appropriated in the same manner. Moving around his arms, waving his hands, or flexing his fingers, he can rapidly and with few efforts create a considerably large range of unique patterns, precise choreographies deployed in both space and time that can become signifiers, pointing toward an infinity of possible signifieds. Raising his arm while showing the palm of his hand may become a signal ordering those seeing it to stand still, during a hunt for example. It may also signify the opposite, as it is the recognition of its meaning by men that gives it its meaning, and while some signs are rooted in nature, constrained by certain characteristics of the earth, life, or the skies, many of those found in the world of man are pure products of a convention, arbitrarily chosen but acknowledged by one or many.

Mankind therefore learned to re-present, to evoke the presence of things by using the presence of another. Our forefathers read the signs of nature, seeing in the display offered by the firmament the announcement of the weather to come, while some of them even believed that the distant future could be seen in the revolutions of the heavenly wheels, the position of the celestial bodies scintillating through the darkest hours of the night, but they also created signs of their own. Some of them may still be used by our contemporaries, even including gestures passed on continuously since time immemorial, while others, made of earth, have reached us only as signifier severed from their signified, like the standing stones found along the coasts of Western Europe, erected before the dawn of civilization, which certainly were endowed with a heavy significance for their maker, a significance that nonetheless vanished with their people, leaving only mysterious traces upon the earth, as we are unable to find back the thread linking these monuments to their original signification.

Weaving bonds between things, man can grasp things that are not present. He can manipulate what is inaccessible. He can refer to things by pointing out to other things that are linked with the first. This capacity to use things of the earth, life, or the skies as replacements for others offers him greater control over his world. It gives him power within his world, a power that he cannot exert over the material, temporal realms. A leader cannot use his body to cause a group of people to stop walking from afar, but he can raise his hand and make a gesture, recognized by others, causing them to stand still immediately. Wielding the power of the sign as a tool, man gains power, but this power is only meaningful when it is distributed among a group. Its usefulness is displayed across a population, as it helps them become a whole, with signs shared among them, their signification recognized, allowing them to transcend some of the limitations imposed on them by the earth, life, and the skies. Appropriating their world, they can retreat deeper into it, growing less dependent on the benevolence of nature and more on themselves, as a community sharing sets of signs, fruit of their imagination.

Communication between individuals predates the appropriation of signs. As mentioned before, signs emerge naturally as part of the play of love and war, selected by life itself as they improved the survival and reproduction of a particular branch, and thus do the ants share information in the form of a palette of substances of their own making and the bees communicate with dances. This appropriation nonetheless now allows the standing animal to turn any part of the earth, life, or the skies into meaningful things, pointing out toward others. New signs can be created almost instantaneously, as an immediate response to a precise need that arose in their daily life. A new stream flows between men. Signs, in the form of earthly objects, sounds in the air, images painted with the radiance of the sun, or gestures of the hands, increasingly pervade their world, with signifiers expressed as things or phenomena perceptible on the earth, with the senses, but whose meaning also ripples throughout the world, as ideas occupying their mind. Different growls uttered by men can refer to specific kinds of beasts that they imitate. A soft rolling of the tongue performed while producing a soothing sound may come to evoke the burbling of a small brook and signal a desire to go there to quench their thirst, whereas fingers may be used to represent the head of a rabbit and communicate to other men the location of the animal. Communication is thus considerably enriched by the appro-

priation of signs by early men. The signs they used can then grow in numbers as well as in precision, and they progressively discover new types of representations.

Having acquired an ability to grasp and manipulate things of the world through the manipulation of signifiers referring to them, man is no longer condemned to live in immediacy, in presence, and in the concrete experience of the sensory realm. Retreating inside the world, as the realm of representations, he can take distance from the earth, life, the skies, and even the world itself, seeing them as objects rather than as merely part of them. Abstraction appears with the appropriation of the world that begins with the mastery of the signs. A simple and yet powerful example of the uniqueness of man's ability in this regard is the creation of maps, as crude as they may be. Tracing lines on the soil with a stick, or carving a bone with a blade, he can turn mountains into lilliputian circles, rivers running through long valleys into small lines, and villages into rectangles, thereby re-presenting a large part of the earth as an image engraved upon another, smaller part of the material realm, allowing him to see it as a whole and to reflect upon its nature. The map is an array of signs, with different features found on the land re-presented with different markings, giving those beholding it the feeling of being able to "grasp" the earth with their mind, gaining power over it. Using such map, men can find their way through lands in which they never set foot, taking advantage of the experiences of others, who offered them this knowledge in the form of an array of signs. Wielding the power of re-presentation as a tool, man increases his resilience, tighten his grip over nature, thus improving his ability to overcome other actors of the great play of love and war.

The appropriation of signs was a prodigious endeavor for mankind, a feat that has yet to be equaled by another branch of the tree of life. The astonishing and yet often overlooked impact of this event on the course of the (hi)story of our species is also the result of our ability to pass on the fruits of our labor of edification of the world to others, across both space and time, seeing the signs we created be supported by men living in different parts of the earth, and passed on to their children as the heavenly wheels continue their endless revolutions and the living return to the soil after having given birth to a new generation taking care of their inheritance, these things of the world, these signs patiently woven by their forefathers, a wealth that gives them strength, resilience, and a clearer vision of their existence and their environment. Traditions are known throughout

the animal world, but their importance in man's life considerably increased with the appropriation of signs. Birds do not receive the songs of their parents and neighbors from birth, but rather learn them during their infancy, as these are passed on from generation to generation, without awareness of the nature of this phenomenon, and likewise men learn the signs of their people from an early age. The appropriation of signs by man, and the considerable inflation in the number and complexity of signs that came as a consequence of it, only further increases the importance of this learning process, this transmission. Peoples of the earth then begin to live in different worlds, enjoying different sets of signs received from their ancestors, only sharing their new creations with those belonging to their group. Man becomes a master of the world, in the same manner as he became a lord of the earth, life, and the skies. This is nonetheless only the first step in his appropriation of this realm.

With each revolution of the earth around the bright jewel blessing the tree of life with its abundant brilliance, fewer and fewer men enjoy a life in close proximity with nature, in lands left intact by the brutal hands of civilization, the hazardous tools of the technological world built by our predecessors and contemporaries. Forests are hewn and burnt to smelt ores, wealth of the earth, and meadows are turned into vast expanses of concrete and metal, fashioned by man for his comfort and to try to appease his insatiable greed. Beholding this realm edified by mankind, we swiftly notice the prominent place that signs now occupy in it. These signs are foremost present in the form of language, but the omnipresence of language in our world tends to blind us to the nature of this remarkable tool of the world appropriated by man, and to the most fundamental signs, shared across tongues and cultures, which do not belong to it. These creations of the mind of man are often so simple, and their usefulness so manifest, that their meaning has reached the confines of the world, and is carried across generations naturally, outside of language.

Taking a glance around us, regardless of whether we are presently enjoying the comfort of our home or advance on a wide avenue of a populous city, we may attempt to wade through the raging sea of words encountered by our eyes or entering our ears, searching for signs standing outside of language. They may be symbols warning people of the presence of danger, or simply indications of the role played by a location in our world. Some are rooted in life itself, in

nature, such as the red lights indicating that vehicles must halt their course, these signs taking their hue from the instinctive fear induced by the dreaded sight of crimson blood. Across most cultures, transcending the frontiers between languages, these colorful indicators are recognized and understood throughout the human world. This color and these shapes are almost universal signifiers pointing out toward precise meanings, signifieds.

Arrows painted on pavement, printed on paper sheets, or displayed on luminous screens are just as easily identified by almost every living man as the signs indicating dangers. They are understood as pointing out a direction meant to be followed, without the need to use language to explain it. We may search with our eyes for such images, demonstrations of the power of the most rudimentary kind of signs, existing in isolation, and yet so easily conveying meaning. We may delve into the brightness of the red lights at the crossroads of our cities, seeing the color of our blood in them, blood that, when spilled, is the sign of a threat of a quenching of the fire of life. We contemplate the signifier, and then meditate on the bond linking it with its signified, this notion of danger that is itself bound to the color of the liquid flowing in our veins. Watching painted arrows indicating directions, we are now offered an occasion to observe their shape more attentively than we ever did before, beholding the contrast between its pointy head and the flat line forming its shaft, mindful of the fact that the shape of this sign is also rooted in nature, evoking the motion of a pointy object piercing through its environment with its sharp end. Other signs may nonetheless also be found, many of them without any basis in the nature of the earth, life, or the skies, being only pure products of convention, fruits of the fertile imagination of men.

Closing our eyelids to dim the deluge of light flowing into our eyes, illuminating our inner world, we may also open up our ears, being vigilant to the signs manifested as tremors in the air filling up the lower heavens. Setting aside the discourses of men, the melodies of the birds, or the whispers of the winds, we may be given the chance to hear isolated signs created by the mind of man, sounds imparted with meaning, outside of language. The most familiar and prevalent may be the harmonious ringing of a bell, hung in the highest point of an ancient city, in a temple built for the celebration of the incomprehensible, announcing the imminence of a celebration. It may also be the strident buzzing of an alarm, signal of the presence of danger in the vicinity, or simply a sound destined to catch the

attention of men or drag them out of the world of dreams.

The signs found outside verbal language are nonetheless not merely to be found around us, expressed with light or sound-waves. We, ourselves, may also embody such signs. Watching our hands, we may realize that these are also canvases of flesh that may be used to re-present. Someone seeing us pointing at something with our index finger would immediately look at what is pointed at, understanding the gesture as a living arrow indicating a direction, but the universality and permanence of this gesture may have veiled its nature as a sign, product of a convention rather than of nature itself. The contemplation of other meaningful gestures, slightly less universal, may bring our attention to their man-made nature, such as a thumbs-up, expressing approbation or congratulation, and which, combined with a lateral to and fro movement of the arm, may be understood as a request for a ride in a vehicle, hitchhiking. Exploring the palette of gestures known to us, let us muse on their nature, their origin, and their ubiquity in the world of men, being mindful of their nature as signifiers pointing toward a signified, playing a role in our lives, facilitating understanding between men. Using our hands or our face, we become bricks of meaning, spread between earth and world, with our flesh and bones becoming earthly signifiers endowed with a worldly signification, with the bond between these realms found within our mind, created by men who have long been turned to ashes or dust by the work of time.

Expressed as images, sounds, or gestures, the aforementioned types of signs are part of our lives and our world. We may now attempt to remember how they came into our lives, how we learned them, but so pervasive are most of them that we certainly discovered their meaning before this experience could leave a clear trace in our memory, during the very first years of our existence. We should nonetheless be mindful of their learned nature, of the fact that their meaning is passed on from generation to generation, rather than part of nature, innate. We have been granted the power to create new signs similar to them, some of which may one day become as ubiquitous as a thumbs-up sign. We can turn any part of the earth, life, or the skies into signifiers, and associate to them a unique signified, imparting it with a meaning of our choosing. Let us try to create such a sign, explaining its meaning to a fellow man, hoping that he would propagate it in our common world, carrying it through time and space, to the confines of the earth and to the end of the ages to come. Contemplating our creation, we may reflect on the nature of

this astonishing and yet often overlooked capacity offered to us, by life itself.

4.1.2 The Spoken Language - Assembling Signs in the Air

As animals crawled out of the shallow waters of the coasts to conquer the dry land, life learned to appropriate the air filling up the heavens to its benefit. These living things let the celestial fluid penetrate their chest to extract its strength, and they began to perceive the vibrations carried by it. Their ears were wide opened to listen to the sounds echoing throughout the sky. These were sometimes stirred up by the earth, in the form of tremor of the crust of the planet, or explosions of magma, the blood of the depths, sometimes by the sky itself, as thunder or winds, but more often by life itself, with soundwaves rippling through the air under the impulse of creatures engaged in the play of love and war, striving to frighten predators, struggling to seduce potential mates, while at the same time listening for the sounds produced by others. The waves echoing through the lower skies are thus swiftly appropriated by the living, and when man sprouted as a new shoot on the animal branch of the tree of life, his body already was endowed with most of the apparatus necessary for him to produce a wide variety of sounds and hear most of those uttered by others. Mercilessly selected across entire eons, animals learned ways to exploit the fluid encompassing the earth, emitting calls to woo a partner, singing songs of merriment, or producing terrifying roars meant to strike fear and awe in the heart of others. Man inherited some of these instinctual abilities, before he learned the secret of the sign, but when this secret was pierced, when this art began to be mastered, the standing creature realized that the air may become more than a space through which the sounds of nature could travel. It may also be a canvas where new signifiers might be created at-will, where man may ex-press himself, building up his world using this ethereal expanse as a foundation, perceiving that even though it may run against his intuition of the nature of the creation, the greatest castles of this world may indeed rest upon this fleeting medium, providing a more flexible and versatile basis than the earth itself.

Man at this point in his (hi)story already knows how to turn things made out of the earth into signifiers, the sensory side of a sign, one pointing out to a meaning found in his world. The produc-



tion and manipulation of earthly objects is nonetheless cumbersome and time-consuming. Painted stones may carry a unique meaning depending on their color, but to show them to others to refer to their meaning is tiring and inefficient, because the earth is rigid, heavy, and its handling takes effort. In contrast with the earth, the sky is light, easily disturbed with small but rapid movements, almost effortlessly producing waves rippling throughout the air, carried over great distances, without the need for the strengths of our limbs. Finely tuning the flow of air exiting his lungs, through his mouth, man can cause his vocal cords to vibrate, triggering a cascade of soundwaves rushing out of his body. He soon discovers how the slightest contractions of his lips, tongue, cheeks, or jaw can change the way these waves are perceived, by his own ears as well as those of other living creatures. This awareness marks the beginning of the exploration of the possibilities offered by this instrument formed by his body, using it to appropriate the celestial ether and edify new regions of his world, using it as a foundation.

The things seen by the eyes have one aspect in common with the things heard by the ears: only what has boundaries can be grasped by the mind. An earthly object is distinguished by his contour, contrasting with the rest of the creation. It is this contrast offered by the boundary that helps us define “things,” as elements that are identified as part of our world and can be reflected upon or referred to, using signs in particular. Even the boundless, like the incomprehensible expanse formed by the heavens, is seen by our mind through the boundaries between the heavens and all the things they encompass, allowing us to identify this expanse without comprehending its

nature. When we look at a particular tree, we see it as a foreground standing in opposition to a background made of other things, a piece of our world distinct from others around it. In the same manner, the soundwaves reaching the depths of our ears need to be passed through the sieve of our mind if meaning is to be found in these waves. The continuity of the flow of our senses needs to be broken in order for its nature to be discerned. The mind can only grasp the discontinuous, unless the permanent can be contrasted with something else. Silence, or a constant noise, can be heard only when one knows what their interruption sounds like, offering a contrast between the incomprehensible nature of the perpetual, marking an absence, and the punctual wave resounding throughout the boundless, marking a presence. The sounds produced by living creatures thus tend to take the form of pulsations, of brief outbursts of soundwaves rippling through the sky, as this allows these audible things to be clearly heard, identified, and grasped, as things of the world.

The early man thus gradually discovers the extent of the sounds he can produce with his vocal tract. Without any profound reflection on the implication of his experiments, which will change the course of life as a whole, our candid ancestor lets his vocal cords vibrate under the impulse of the air that he pushes out of his chest, and he creates a palette of sounds with different qualities, like musical notes, by adjusting his lips, his jaw, or his tongue. These sounds can be sustained for as long as there is still air coming out of the lungs, and they are continuously heard by himself and those in his vicinity. They are what we now technically call “vowels,” with different languages using a different amount of them, from a handful to a couple dozen, like the sounds written with the letters “a” “e” “i” “o” “u” in the English language, among others. Our ancestor then swiftly discovered that he could interrupt these sounds, cutting them by constraining the flow of air coming out of his mouth and nose abruptly. Furthermore, the way by which this flow was interrupted could be reliably heard, changing the audible qualities of the vowels he produced. Tightly closing his lips while uttering an “a,” the continuity of the sound is broken, and three parts can now be heard: “apa.” Slightly softening this closing of the lips, the sound of the interruption is heard differently: “aba.” Each part of the vocal tract can thus be used to interrupt the flow of air in different manners, each one of which leaving audible traces on this flow propagated through the sky and penetrating the ears and mind of those endowed with them that are found close by. Firmly pressing the

tongue on the front of the palate produces the sound “ata,” while a softer contact can be heard as “ada.” These unique manners of interrupting a vowel sound are what are technically called “consonants,” a name that brings our attention to the fundamental imbalance between them and vowels, due to the fact that consonants can only be heard together with a vowel, as its interruption, whereas vowels can be uttered and sustained continuously, only dying out when the amount of air in the lungs has been exhausted.

Playing with the flows of air coming out of their mouths, using every part of their vocal instrument to transform the sound resonating through their ears, men thus explored the range of sounds they could produce with it, appropriating their body and venturing into a space, mining a new land that would ultimately serve as a new resource for the edification of their world. First, they nonetheless had to reduce the range of possibilities it offered. They had to break up the infinite into a finite, limited set of things that could be grasped with their mind, shared and made their own possession. Early on, even before they became men, they instinctively used such sounds as signifiers, producing growls, shouts, and calls signaling the presence of danger, a state of yearning for a mate, or simply meant to strike fear in the heart of those hearing them. Man nevertheless learned that more could be done with the instrument offered to him by life itself. Reducing the infinity of sounds he can produce, breaking up the continuous into a limited set of predefined elements, his mind can grasp these elements with a great precision, speed, and ease, allowing them to be used to create audible signifiers more finely crafted than ever before. An analogy may be found in music: our vocal tract is like a violin, which can produce an infinity of sounds. When the bow is inexpertly passed on the strings, the continuity and dissonance of the resulting sound causes it to be perceived as noise. On the other hand, when a skilled musician plays, the fact that he precisely uses only a very limited set of notes, recognized by the audience and grasped by their mind as audible “grains” rather than a random, continuous flux, causes it to be identified as music, pleasurable to the ears when the sequences are harmoniously chosen. In the same manner, the quantification of the sounds produced by the vocal tract allows the emergence of a new form of “music,” the appearance of a new set of tools that can be appropriated by man to create new signs, with a remarkable efficiency and precision, one offered by the richness of the vocal apparatus.

The details of the emergence of a granularity of the sounds pro-

duced by the vocal tract used to create and share signs among men are lost in oblivion, and we may never know how it occurred, but the process by itself seems relatively easy to understand and straightforward. It may have occurred once or among various groups of early men during different eras, with individuals uttering certain vowels and consonants to express their feelings, replacing the grunts and growls of their ancestors with more harmonious, well-defined, and precisely pronounced series of sounds, to let other men know of their fears, their desires, their joy, or their anger. Taught from parent to children, from neighbor to neighbor, these sounds spread among men, across the earth and accompanying the turning of the heavenly wheels. They slowly evolved as men began to leave traces of their individuality upon them, and as oral language emerged, so did languages and dialects, with men only understanding the signs produced by those living in their vicinity, with whom they formed a community sharing a manner of producing signs with sounds and a collection of signs established by convention and passed on from generation to generation.

Man thus patiently appropriates the air, the lower heavens, to use it as a new foundation for the elevation of his world, using it as an inexhaustible source of signifiers. The very nature of the air indeed gives it a considerable advantage over the earth and life for this purpose. To create signifiers using the earth involves considerable efforts, to shape material things, objects that can be used as parts of signs. They also need to be transported, and they can be worn out, stolen, or lost. Signifiers using life itself, the body, are more versatile and practical, such as gestures and facial expressions, but their production demands physical effort, is relatively slow, and it implies direct visual contact. In contrast with this, oral language presents several crucial advantages: it demands few efforts, and thus can be used for sustained periods of time and at a fast pace. It is incredibly versatile, as the number of signs that can be almost effortlessly produced is virtually boundless, and oral signifiers can be used when the interlocutor cannot be seen, such as during the night. The greatest innovation brought on by the appropriation of the vocal tract by man, and what marks the true difference between the use of signs as other animals do and the emergence of language is nonetheless the capacity to combine signs to form larger structures with them. Individual signs are like bricks, and many animals are able to craft and use them, but only man has learned to use them to build larger structures by assembling them, allowing his world

to grow considerably, edifying things that are the products of his imagination and experience rather than simply representations of the earth, life, or the skies.

The emergence of language is nonetheless first rooted in the experience of nature, in the sensations linked with the earth, life, and the skies. Man's first words are a form of mimicking of the sounds of these realms, like an infant reproducing those uttered by his parents. Living exposed to the wrath of the heavens, the thundering voice of the skies, he learns to fear this phenomenon and designates it with a word representing the terrifying sound associated with it: a thunderclap. In contrast with it, the sound of the small brooks from which he draws the water sustaining him is linked with more gentle sounding words, like burble, plop, babble, murmur, which also are imitations of the voice of the earth. A collection of words thus appears in man's world, mainly rooted in what he hears and sees, like grains of meaning that he can freely distribute to others, allowing them to share thoughts, to picture the same things in their mind, even when these things are nowhere to be found around them, providing a substitute for an experience of the earth, life, or the skies. Our ancestors nonetheless soon discover the real strength of language, the fact that although the signifiers he uses can be rooted in the flux coming from his senses, this is not necessarily the case. He is free to use purely arbitrary combinations of vowels and consonants to represent any possible meaning, allowing an infinity of signs to be created.

Signs can thus be established as pure conventions, the result of an agreement between men, who acknowledge the association between an arbitrary sequence of vowels and consonants with a particular signification. The word "thought" can hardly be associated with a sensation linked with this concept, and this potential absence of natural bond between signifier and signified invites man to explore and appropriate larger portions of his world, areas of his mind not directly linked with the experience of the earth, life, or the skies. Free to create according to his whims, rather than simply imitating nature, he can increasingly fashion things of the world baring few resemblances with the things belonging to the earth, life, and the skies. Nature indeed knows no concept of "idea," "thought," or "good." These words designate things only found within man's world, within his mind, rather than on the earth. This marks the birth of metaphysics, concepts that are not directly rooted in the phenomenon of the earth, life, and the skies, in the flow of the senses.

From a creature inhabiting the earth, man slowly becomes one with its feet upon the earth but its mind in its own world, built with signs mostly made by its ancestors and received as an inheritance during its youth. Man elevates himself away from the earth as his world is edified with signs to increasingly greater heights, thereby also progressively distancing himself from the raw experience of nature, unmediated by metaphysics, by subjective ideas not grounded in nature. This movement, from earth to world, is what allows man to wield language as a formidable tool, opening up his mind and placing his branch of life far above all the others forming the majestic tree of life.

There is nonetheless more to language than mere words. If the first pillar of human language is the possibility to create arbitrary signifiers associated with any signified, the second pillar would then be the ability to create equally arbitrary structures by assembling signs to create secondary signs, designating things that are more than the sum of their parts. The noun “tree” can be linked to the adjective “large” to designate something combining the two signs in a unique way to designate a large tree, establishing a qualifying relationship between the two signs, determined in English by the location of the adjective relative to the noun. Some signs may nonetheless also establish similar relationships between words and concepts, serving as a cement helping man build larger signs with elementary bricks formed by words. This is the case of the English “’s” which is meaningless in isolation but can among other usages be used to express possession: “john’s tree.” This simple relationship between signs allows the creation of a considerable number of secondary signs, greatly expanding the range of what can be expressed with a limited number of signs, words, and man can create new types of similar relationships through convention, either by creating new signs defining them, or simply through the emergence of rules determining such relationships according to the way words are ordered, as it is the case in English for adjectives qualifying a noun. Generation after generation, increasingly complex structures thus emerge within language, leading to an astonishing inflation of man’s world, which is increasingly filled with concepts that are the product of his mind rather than the fruits of nature. As order naturally emerges following the sharing of sets of rules defining relationships between words among large groups of men, “grammar” appears, without anyone being responsible for its creation. Language grows organically, shaped by myriads of interactions between men attempting to express them-

selves and understand others, and as the celestial wheels continue their endless revolutions, the grain of the different languages of the early groups of men grows finer, allowing more subtle descriptions and more precise reflection.

The advent of language marks a giant leap in man's appropriation of his world. Thanks to its power, he can benefit from the experiences of countless other men, as the fruit of their experiences can be shared with him, using words to describe them. This knowledge, fruit of experiences marrying the flow of the senses with reflection and imagination, is then accumulated, passed on across the earth and across time, work of the skies, as an inheritance, allowing mankind to build a vast storehouse of knowledge within his world, using words as bricks, and brains as a foundation supporting it, a storehouse split into several sections, as the arbitrary nature of the signs composing it leads to a diversity of languages and cultures, arising from the isolation of populations on the earth but leading to separations in the world, with people encountering each other in a same land but finding themselves unable to communicate, due to the fact that they inhabit different worlds, mediated by different languages, having inherited different traditions.

Man may have gained tremendous power through his appropriation of language, but so powerful is this tool of the world that he is nonetheless as much shaped by its force as he wields it. His mind, his worldview, is deeply shaped by this language he received as a gift during his youth. The way he sees the earth, life, and the skies is through the prism of this language, which shatters the oneness of all that *is* into a multitude of things, arbitrarily cut out and associated with often equally arbitrary names. Language is a ship carrying mankind across the sea of time, but one on which no one is at the helm, and few are standing at the bow, aware of where they are all going. The winds of the skies and the currents of the seas are guiding the ship, determining the destination of our species, without the passengers worrying about their condition. Their life is shaped by the ship, as they benefit from its ability to carry them across the waters. The tool shapes the arm of the worker, with both being used by one another, something that should invite us to reflect on the outcome of this process, reflect on whether we appropriate the world or are simply appropriated by it. Man's world may thus be seen to be the child of earth and sky, as much as the product of his work. Few would nonetheless stop their course as they frantically run the great race for the appropriation of nature to consider this

idea, continuing to tirelessly edify the world using every tool at their disposal, ignorant of its end.

The emergence of language thus occurred in the sky, with the translucent fluid coating our planet used as a medium for our expression, with our thoughts poured out in it, as waves invisibly propagating in all directions, stirring up the air and resonating in the ears of the living things endowed with them. Man thereby appropriates the sky, a sign of the movement of his species, desperately trying to elevate itself above the earth, with his remote ancestors having painstakingly crawled out of the ocean to conquer the dry land, and now building up their world using the realm whose depths remain unreachable, the heavens, but toward which his eyes are nonetheless constantly turned. Language first appears as speech, as sounds carried by the air filling up the sky, and this new tool that is both shaped by man and shapes him in equal measure bears the marks of the upper realm in which it is unfolded. Standing in contrast with the earth, the realm that can be touched and appears to largely remain stable and constant, the sky represents the ungraspable, the fleeting, with the heavenly wheels unceasingly turning, offering us an ever-changing spectacle displayed across the celestial vault. The earth is matter, while the sky is both space and time, interwoven together in a way that cannot be fathomed by our mind, and thus the heavenly nature of the first languages is intrinsically linked with the time dimension. Words and sentences are unfolded through time, as fleeting phenomena, waves spreading through space and swiftly fading out into oblivion, replaced by others or simply giving way to silence. A consequence of this celestial nature of speech is the fact that the parts of the world built upon it are as fleeting as the heavenly realm itself. The malleability and lightness of the air allows man to effortlessly utter signifiers, but these are condemned to disappear in the blinking of an eye, leaving no trace of their existence, except for the imprint they may produce in the memory of those hearing them. This ease of production allowed language to emerge as speech, but it also reins in the growth of the world built with it, as the memory of men is very limited, and the passing on of these imprints to new generations troublesome and unreliable. This is why the spoken words of the ancient generations are largely lost. What they strenuously built, the fruit of their experiences of the earth, life, and the sky, the product of their reflection and imagination, like most of what man has created has faded into oblivion, never to be recovered, with only a few precious nuggets of knowledge having



reached the present day from the dawn of our branch of life.

An inheritance is nonetheless received by each generation: a language, which even though it has evolved to such an extent that it would not be understood by those having first invented it, it bears within itself the traces of its origin, and it still contains traces of the creative work of its inventors, masked by the passing of time but nonetheless still very much present. Dialogues between men, as waves echoing through the air, reverberating between the sky and the world, still represent manifestations of this inheritance, honoring the work of their most distant forefathers, expressed as a great variety of non-mutually intelligible languages. Like the daily spectacle of the heavens, spoken languages continuously change, receiving the influence of the realm in which they are manifested, benefiting from its strength, and constrained by its limitations.

The impact of the creative power offered to man by spoken language is thus tremendous. Basic signs, words, can be assembled into sentences, which can themselves be assembled into speeches, endowed with a meaning that transcends the sum of their parts. He can express himself, transform his emotions into signs, almost without limits, building a new world with words carried by the air. So pervasive do these signs become in his life that he becomes blind to their nature. Seeing the earth, life, and the skies through these bricks of meaning, he becomes enclosed within the world built by his kind, unconsciously associating each thing he experiences with his senses with words, signs arbitrarily created by other men. Wielding his tongue as a tool, he appropriates the gifts of these men, making the world into which he was thrown at birth his home, the house he

inhabits every day of his life. Supported by the earthly nature of the web of nerves forming his brain, this world allows him to extend the horizon of his mind, toward the past and the future, as well as toward the confines of the earth, as he can now hear the words of men who returned to the earth long before he was born, and he can ask his children to pass on messages to future generations, creating a bond through time and space, through the heavens, that would not be possible without language.

The impact of the advent of spoken language is nonetheless not only felt on an individual level, as a transformation of one's experience of the world. It also profoundly affects the bond uniting men together as communities. Other animals can express their feelings with sounds and earthly contact, with manifestations of love or hate, tenderness or anger, but living his life within language, man can do more. He can share incredibly precise and complex thoughts or impressions through the sky rather than the earth, as waves running through the air, rather than merely communicate his emotions by touching others with his flesh, a means that severely limits expression. He can convince others with his power of persuasion, with reason, rather than with physical, earthly violence or seduction. The tongue becomes more influential, more powerful than the sharpest claws or the strongest limbs, and the world, as a product of man's efforts, his construction, becomes more prominent, while the earth, life, and the sky are slowly relegated to the background of his existence, even though most do not realize its importance, blinded by its pervasiveness, like a fish blind to the water in which it spends its days.

Language is thus more than a way to appropriate the world. Speech is more than a means of using sky and world to improve and refine communication using signs. The emergence of language, starting as speech, also leads to the appearance of the inner-word, deeply intertwined with the appearance of reason. The inner-word is man's use of language "in his head," speaking without using his mouth, but rather only using the voice heard by himself, in his mind, wielding this tool to reflect, to dissect the flow of the senses and make sense of it, allowing a considerable growth of his capacity to grasp the meaning of his world. He can manipulate signs using this inner voice, grasping things and concepts as objects that can be put in relation with others to create a mental picture that is more comprehensible than the raw impression left by a sensory experience, in the same manner as the use of the model of a city can help one

represent the real thing, and the ability to rearrange the pieces of the model easily can help a planner envision ways to improve it. By shattering the oneness of being to transform it into a multitude of "things," animals discovered a way to grasp the creation with their senses, perceiving these things with their mind and allowing them to develop responses linked with their specificities, a flight reaction when seeing a dangerous predator for example. With language, man developed the ability to manipulate these things as signs, reordering them according to his inspiration, in addition to being able to create signs with purely worldly functions, metalinguistic or metaphysical, designating things that cannot be experienced with the senses, things that have no meaning upon the earth, in life, or the skies, but rather only make sense within language itself, such as the concepts of "idea" or "good," or purely grammatical words. This astonishing and yet often underappreciated ability is what allows man to take control of the earth, life, and the skies, to seize the helm of his existence, treating all things, even his own life, as an object of reflection, seen from a distance, trying to rearrange them so that they would fit his vision of what they should be, for the better and for the worse.

Numerous are the tools we use in our daily lives. They are discovered or invented by our ascendants, who tirelessly labored to conquer the earth, life, the world, and the skies, so that they would be able to lift up the men of the present above the condition of their genitors. These tools, our inalienable inheritance, now pervade every aspect of our existence. We wield them in ours hands, carrying the torch our forefathers passed on to us as we continue to run the great race for the domination of nature in their stead, adding our contribution along the way before we, in turn, pass this torch on to a new generation. Our appropriation of the earth allows us to dwell in houses of stone, to plunder the riches of the soil, or to harness the strengths of nature to save our own. We have subdued life as a whole, securing with ease our daily bread, fed by seemingly lesser creatures living under our inflexible yoke. Our branch of life has pierced the secrets of the skies, and we can soar higher than any bird, exploiting the air and capturing the light of the stars for our benefit. Our daily routine may be filled with the products of our subjugation of these three realms, but no other instrument appropriated by man is as pervasive and occupies a larger place as the crown jewel of our conquest of the world: the spoken word. This prominence is so not only due to the fact that we speak and hear others speaking almost

every day we spend upon the earth, but foremost because it is the vehicle of reflection, of reason, and we use it as an inner voice, a silent whisper resonating within our mind, expressing our emotions as assemblies of mute but meaningful signs.

Shutting ourselves alone in a secluded space, plunging our corporal envelope into an almost absolute silence and closing our eyes to reduce the flow of the senses running into our mind, we begin to contemplate our relationship with our inner voice. The stillness of the air, the absence of sounds, amplifies the intensity of this voice, and we may feel compelled to struggle to silence it as well. Concentration is needed for us to cease to hear the tornado of thoughts and memories resonating within our mind, in the form of this gushing fountain of words. Taking control of it, without extinguishing it, let us pay attention to this voice that not only accompanies us almost every instant of our life, but also represents a core part of our self. Letting our own words resonate in our mind, we notice their nature as signs. Each word is unfolded through time, in unison with the turning of the celestial wheels, with brief moments of silence separating them, helping us distinguish the boundaries of these things of the world. Let us notice how these words are articulated with one another, following rules devised at the dawn of our history by unknown members of our bloodline, forming larger structures endowed with a meaning that represents more than the conjunction of the signification of each word. We may now muse on the link between the meaning of the parts and the one of the whole, wondering about the inconspicuous power of this tool defining our species, becoming mindful of the fact that we dwell *in* language, and that we experience being through particular languages.

Breaking up our isolation; passing the threshold of our secluded space and letting the silence that reigned within it be shattered, we can now immerse ourselves in the world's swirling commotion, hearing the words and noise occupying the air of our cities. There, we may seek an encounter with the unfamiliar, the ungraspable, by exposing ourselves to the words spoken by people dwelling in a different language, who received a different inheritance from their parents, one that we do not understand at all. Letting this mysterious brook of sounds run into our ears, we know that each word is a signifier bound with a meaning, but we cannot see through the surface of these signs, and are condemned to only experience their appearance, to hear them as a sound rippling through the air, deaf to what they could tell us of the world. We feel these sound-waves

echoing with our bones, but they are meaningless to us, remaining obstinately disconnected from any thing of our world, and thus a high wall stands between us and those dwelling in this language, in this different world, with signifiers so close to our senses and signifieds nevertheless so far away from the reach of our mind. Facing the ungraspable should nonetheless invite us to fully appreciate the beauty, the intricacy, and the power of our language, with each word, each structure perfectly familiar to us, immediately and effortlessly understood, evoking emotions, images, or ideas in our mind, as the result of the patient weaving of bonds between sounds and meanings, signifiers and signifieds, an activity that occupied a large part of our infancy, a laborious learning that itself left no imprint in our young memory, even if we now still enjoy its fruits.

Filled with awe at the realization of the preciousness of the gift offered to us since birth, conscious of our ability to wield language as a mighty instrument, we use our mouth and our tongue to finely tune the flow of air pushed out of our lungs, to let our voice loudly resound in the sky. Our voice reverberates against the earth, entering the ears of those sharing with us this land and slipping into their mind, weaving a bond between us, using a chain of audible signs. Let us shout words of wisdom and beauty with all our heart, stirring up the air enfolding the earth, like a voluminous stone thrown in the middle of a lake whose water was perfectly still. Let our voice shatter silence and fill the skies with signs bearing the marks of our branch of life, being mindful of the meaning of each word we utter, letting them be interlaced with brief moments of calm, absences of sound contrasting with the presence of our voice, setting boundaries between them and allowing them to be grasped by our audience. These invisible tremors are now traveling through the skies, slowly fading away, reaching the heights remaining inaccessible to our body, mixed with a myriad of other sounds and voices as they continue to be unfurled through space and time.

Looking back at the last few days, we may now reflect on the intensiveness of our use of spoken language, as both our inner and outer voice. Let the pervasiveness of this tool finally appear at the foreground of our mind, that we may realize how much of our existence is mediated through it. We dwell in language and see the earth, life, the skies, and the world itself through its lens, one that has been crafted by both man and nature, at the dawn of our history, with men continuously forging more and more signs. The realms of nature then unhurriedly but ineluctably wear them down, constraining

them, shaping them through generations, causing them to bear little resemblance with what they were at their conception. We may now contemplate our mother tongue, as a precious object, an heirloom faithfully passed on from father to son, mother to daughter, and let us wonder at the extent of the community with whom we share it and the nature of the bond uniting us, allowing us to miraculously pour out our emotions into words intelligible to them, as we receive the fruits of their enthralling desire for expression. Venturing into untrodden paths of the world, we may also get acquainted with new languages, learning the links between signifiers and signifieds, until the day we may be able to live in this new language, seeing the world through a new lens, expanding our horizon and our world. Now trying to learn a single word, we may experience the discovery of such a bond, one that implies the creation of new connections within the convoluted web of nerves supporting our mind, paying close attention to the impact of this remarkable ability upon the history of our branch of the tree of life, and our personal experience of being.

4.1.3 The Written Language - Assembling Signs on the Earth

Adroitly forging words, expertly assembling them to depict the beauty and the horrors of being, the first speakers used their tongue to edify their world, as a reflection of the earth, life, and the skies, and as an image of their innermost desires, the visions poured out by their imagination. Resting upon the heavenly ether, manifested as invisible waves rippling through the atmosphere, these new things found in their world soon came to represent a major part of the flow of their senses running from the sky to seep into their ears, piercing through their mind. Language began to displace nature within this world, chasing away the raw emotions evoked by a close contact with the realms explored by the senses and replacing them with constructions made of words, leading the standing creature to delve headlong into a sea of concepts and things of the world, forgetting the difference between the sign and the truth of what it represents, which transcends both words and the world. This blindness nonetheless triggered a formidable integration, a merger of the worldviews of all men. Before this event, each man lived relatively isolated, in a world of his own, only painstakingly communicating his emotions with other humans through contact of the flesh, or isolated signs embodied in the earth, life, or the skies. It was as if each mind

was a puddle of water lying on the face of the earth, with only droplets occasionally passing from one to the other. The advent of speech caused a profound transformation of this world made of a vast array of isolated puddles, as if the air was appropriated to carve channels between each one of them, allowing their content to flow freely, all sharing the same mass of water, becoming a sea, forming a whole, rather than a disorderly group of puddles separated from one another.

Men then began to share a common world, doing more than simply living together on the earth, under the sky, as parts of life. They could now unite their forces, join their willpower, to contribute to the safeguarding and further edification of this common space, this castle in the sky, manifested as waves in the air echoing through the world, where their meaning shines and is seen. Uniting their force of reflection and creation, living surrounded with signs every day of their lives, they began to reflect on the nature of their world, to observe its structures and materials, and to notice that there is still so much to be appropriated in this realm built upon earth and sky.

As formidable a tool as it may be, speech nonetheless presents some important drawbacks tied to its very nature. Its heavenly nature, the fact that it rests upon waves running through the air or thought unfolded through time, in particular, significantly constrains the language, and thus the world, of those only expressing themselves with their tongue or their inner voice. Reflecting the properties of the skies, speech is fleeting and evanescent, with spoken words heard during an instant and then fading into silence. Speech is tightly linked with presence, as we hear sentences as a moving chain of passing words, a series of sounds deciphered as signs, with only one of them heard in the present. The words of the past cannot be brought back as waves in the air, unless one has memorized them, and the words of the future cannot be heard before they are pronounced. Man cannot hear an entire discourse in its globality, and he is condemned to let it be expressed across a duration of time to grasp its meaning. Speech is a celestial language, one unfolded through time, the work of the skies, and thus this work unceasingly erodes the world of man, causing his creations to crumble and vanish, only leaving fleeting traces in the memory of those who heard them. The wise men living at the dawn of our history nonetheless saw that language was not inherently heavenly. They knew that this remarkable tool of the world could be brought to the earth, allowing the appropriation of new parts of their world, and the construction

of new structures within the space opened by this clearing work.

Some of our ancestors, shrewd observers of the world into which they were thrown, thus realized that language could be borne by the earth, just like speech is carried by the skies. Since time immemorial, they already used pieces of earth as signifiers, using piles of stones to mark graves, colored patterns inscribed on skin, leather, or stone to proclaim their belonging to a group, or objects like a staff as an earthly symbol of authority. Using his fingers, or what may have been the first tool acquired by man from the earth, the wooden stick, man can trace lines on the surface of the earth, in the mud, on sand, or even on stone when the tip of this stylus is burnt and turned into charcoal. Directing the stylus with his hand and his mind, he sees how he can create arbitrary shapes engraved in the earth, shapes that will remain as long as they adequately resist the work of erosion of the winds, the rain, or the sun. He discovers that the products of his imagination, the work of his fingers, can be etched on this realm and remain for years, even outliving him, while each one of the words uttered by his mouth would have vanished from the air and from the memory of his fellows. The fleeting and evanescent nature of the skies above always stands in contrast with the stability and rigidity of the earth below. These marks on the earth are not tied to a presence, as the parts of the line that have already been inscribed remain visible, and the one beholding the inscription can contemplate the whole that it forms at a glance, seeing all that has been traced in the past with his senses, in the present. Intrigued by the power of the earthly inscription, man then explored the possibilities it offered, playing with instruments and pigments, appropriating this new form of earthly expression, differing from heavenly speech.

Using fingers or sticks, covered with ochre or coal, our cave-dwelling forefathers used their walls as canvases, pouring out the images of their world onto them. They began to re-present people and animals as silhouettes and crude drawings, creating signifiers mirroring the appearance of the signified attached to them. The appropriation of oral language nonetheless led to the emergence of an ambiguity or a duality in the link between some signifiers and their signifieds. A crude re-presentation of a man drawn with charcoal on a wall may be a signifier pointing out to the concept of man, as a “thing” present on the earth, or to the evocation of a particular individual, but as the one beholding this artwork recognizes this signifier, it may also be seen as referring to the word “man,” or to the



Parkyn, An Introduction to the Study of Prehistoric Art, 114.
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Parkyn, An Introduction to the Study of Prehistoric Art, 114.
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Figure 4.1: Paleolithic paintings of anthropomorphic figures from various caves in Andalusia, Spain. (Parkyn, An Introduction to the Study of Prehistoric Art, 114.).

name of the individual represented on the wall. One signifier may refer to both man as something experienced with the senses, part of the world even before the advent of language, and to a particular element present within language, a word or a name which may also be expressed as a heavenly signifier, as a particular wave pattern propagated through the air or heard within one's mind. The realization of the fact that an earthly signifier may be linked to a particular word, an element part of a spoken, heavenly language, and that this bond may be shared by all men represents the first step toward the metamorphosis of language, from a castle in the sky to one securely anchored in the earth, while remaining attached to the upper realm.

Rooted in the sky, supported by air, language is manifested as speech. Brought down to the earth by a branch of the tree of life, growing between the realm above and the one below it, it becomes writing, with the two means representing pillars upon which a large part of man's world rests. The crude representation of himself upon mud the rocky crust of the planet is but a starting point of this anchoring of the world in the earth. The key to this evolution

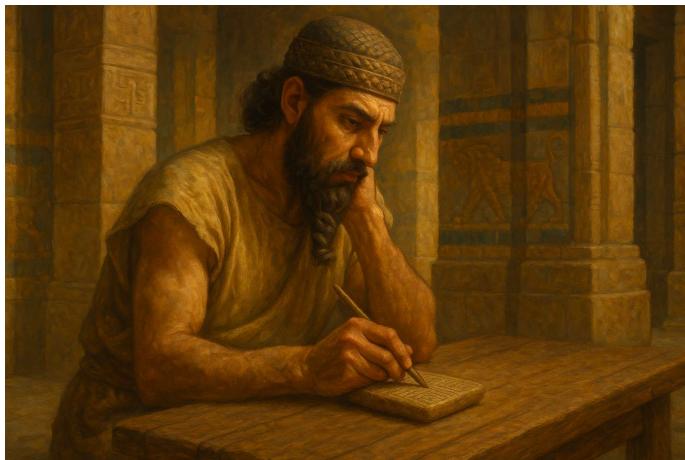
of language, this deeper appropriation of the world by intertwining signs with both earth and sky, is then discovered when one of our ancestors came to the realization that these inscriptions on the earth could not only reflect individual words, but also the fullness of spoken language, his mother tongue. The first writers, the smiths forging the first characters, certainly first worked to create simple representations of the things around them, belonging either to the earth, life, or the skies. After man, animals were drawn as silhouettes in caves, as the artists learned their trade. The painter was nonetheless soon separated from the writer, with the former favoring beauty and faithfulness, while the latter only endeavored to produce simple signs that could be produced with ease and be effortlessly recognized by others as signifiers for a particular word and read appropriately. The writer nonetheless soon encountered an obstacle, as his speech included many words that have no incarnation upon the earth, in life, or the skies, concepts that cannot be represented as an image and easily recognized, signifiers associated to a purely worldly signified. The structures inherent to his mother tongue, such as the aforementioned English mark of possession “’s,” have no shape associated to them, which could be painted, drawn, or carved, contrary to most living things such as man, plants, and beasts. Confronted to this dilemma, the first writers were forced to diligently study the nature of their own speech, reflecting on language as an object to pierce the secrets of its structures, which they master perfectly since their infancy but whose nature remains mysterious to them.

Language then becomes something more than the scaffold of man’s world, the main tool by which he represents the earth, life, and the sky within this world. The tool of representation also becomes represented. The structure of this major part of the world is itself depicted with signs, within language. It is as if man began to further build his world with mirrors, signs referring to the very structure of which they are part, marking the birth a part of language describing language itself, now technically called “meta-language.” Finally beholding the tools with which he edifies his world as objects, he can begin to grasp its nature, to appropriate it and not merely let himself be carried through the sky, through space and time, imprisoned in this world built by his ancestors and shaped by the work of nature, with his own influence upon it being largely negligible. He used language as a tool to bring the earth, life, the skies, and some parts of the world to this world into which he was thrown at birth, and now he brings language itself within it, using

the tool to work on the tool itself, perfecting the nature of his world. The result of this labor is a clearer vision of the nature of the language that he uses as speech, which in turn allows him to bring this heavenly language to the earth, as writing.

Once each part of the language that man uses is seen clearly as an object of study, itself described within language, each one of them can be re-presented as earthly signs, with signifiers painted on papyrus, carved on stone, or drawn on clay. Strategies are devised to depict what cannot be seen, to represent what cannot be experienced with the senses, such as the signs expressing relationships between signs themselves. One of these strategies, extensively used in the written Chinese language, is to base the appearance of signs without an obvious earthly representation upon other signs that do and share with it a similar heavenly representation, that is, whose spoken signifiers sound somewhat similar. The mark of the plural of most nouns of the English language, “-s,” may perhaps be represented as a snake, because both the word snake begins with the same sound. Slightly modifying this image of a snake to mark its nature as a sign describing language itself rather than the living thing with which it shares its appearance, the new sign becomes relatively arbitrary, the product of the imagination of man rather than a reflection of the truth of nature. It needs to be taught by its inventor to others in order to be understood by them. The first builders of the written language thus worked to grasp language itself and bring heavenly speech to the earth, as written words. They patiently crafted hundreds or thousands of signifiers corresponding not only to the nouns of each thing they saw around them, but also to each meta-physical element of their world, things that cannot be experienced by the senses and thus can only be abstractly represented upon the earth. Once this work was completed, speech could then be put into writing. The voices carried by the air through the sky could be etched on the earth.

In the same manner as speech began with words imitating the sounds of nature, writing also began with small drawings representing the things visible upon the earth, in life, or the skies. Both nonetheless soon evolved, progressively ceasing to reflect the truth of nature to become more abstract, arbitrary products of the imagination of man, things originating from his world. The early writers indeed soon realized that signs in general, and language in particular, can be rooted in nature but also be the pure product of conventions, without depreciating their usefulness as tools of appropriation of



the world. The characters forming a written language, which were at first meticulously drawn images, then begin to be simplified to be reproduced more swiftly, with less effort. The representations of nature become more and more blurry, as man realizes that faithfulness plays little part in their function as signifiers. Any trace upon the earth can be used to represent any meaning. What matters is the teaching and learning of the sign, the weaving of the bond between signifier and signified, a fact that is itself learned by early users of the written language, leading to increasingly practical representations, with characters bearing increasingly little resemblance to the things they represent.

Associating a distinct character to each thing of the earth, life, the skies, or the world nonetheless made the first written languages very complex to read and involved an extremely lengthy learning process. With such earthly languages, like Sumerian, Chinese, or ancient Maya, thousands of characters have to be mastered before one can communicate with ease. The earth does several revolutions around our the daystar before a man can bring his speech to writing, bring his heavenly language down to the earth. The race for the appropriation of the world nonetheless continued, and man furthered his reflection upon the nature of this tool that he uses to communicate and edify his world. This led to the discovery of a simpler way to inscribe speech upon the earth, as he perceived that characters do not have to represent whole words, and that they can rather transcribe the sounds composing these words, the chains of vowels and consonants defining them. The number of such vowels and consonants rarely exceeds a few dozens, and thus the crafting and mastery

of a few dozen characters may be enough to faithfully represent the fullness of a spoken language in writing. Such a strategy not only considerably simplifies the acquisition of literacy, it also allows the pronunciation of the written word to be inscribed on the earth, in addition to its meaning. The pronunciation of a character representing the appearance of an object will indeed ineluctably evolve under the influence of the work of the skies, the flow of time, and thus the sound with which it was originally associated will irremediably be lost. This is not the case when the pronunciation of these words is written down, and as long as someone remembers the way to read each letter, the entire language can recover its original voice and be once again brought to the air, turned into waves running through the sky, echoing with the voices of a distant past, even eons after those having created them have returned to the earth.

Resting on both earth and sky, language becomes more versatile, more resistant, taking advantage of the qualities of the newly appropriated realm. Written down, etched on the earth, texts can be contemplated in their entirety at a glance, with the eye choosing what is read, and at what pace, offering a control impossible with oral speech, celestial language. The signifiers representing these texts can be carried to the confines of the earth and be brought back to the sky there, resurrecting the voice that gave birth to them. They can pass through the ages and even be forgotten in the depths of the soil and one day be unearthed and read. The limits of man's memory can be transcended, using the earth as a storehouse of texts that may be longer than what he may read in a lifetime, using the stability of the lower realm to solidify words into stone, clay, or leather, marking the surface separating earth and air with signs, revealed to our eyes by the splendor of the celestial bodies or man-made fire. Expressed as speech or writing, language thus remains bound to the two realms encompassing life. Speech is carried by the bits of earth forming the air enfolding our planet, causing our eardrums to vibrate and triggering waves of impulses in our nerves, while written texts are only seen when the air and light enter into contact with the letters and characters forming them, allowing light to be reflected on their surface and invariably running into our eyes, also triggering a cascade of nervous signals poured into our mind, entering our world as sensations.

Life offered man the instrument with which he can make his voice heard throughout the sky, but he was forced to use his creativity, his capacity to appropriate the wealth of the earth, to devise

instruments allowing him to pour out the content of his world onto the earth, inscribing signs on stone, clay, wax, or leather. The stylus, the feather, or the pen then complete the tongue, and language is no longer solely unfolded through time, passing through the sky, it also occupies portions of space, parts of the earth, incarnated as objects that can be stored, traded, or copied. This transformation from an extension in time to one in space, and this passage from sky to earth, from the ethereal to the material, led to representation of the flow of time of speech as an imaginary line upon which the characters are written. This line can be of arbitrary direction, and some traditions decided to use vertical ones, while most settled on a horizontal one, either going from left to right or from right to left, with the line interrupted to follow the shape of the medium. Easily followed by the eye, which only deciphers signifiers at the center of our field of vision, the line is a path where signs can be found, where man can extract meaning from a savant marriage of light and earth, ink and paper, with the contrast between the canvas and the characters written on it reflecting parts of the world, which can be accessed by gazing at a specific part of the earth supporting them. First written with each letter separated from others by gaps, texts using alphabetic scripts then often evolved and dispensed with them. The tip of the stylus, brush, or pen ran continuously for the writing of entire words, making turns and curves to seamlessly unite each letter with the one following it, like a dance composed of harmonious movements, carefully planned and repeated until perfection is reached.

The advent of literacy nonetheless represents more than the mere fixing, the incarnation of speech into the earth. It not only allows the preservation of speech, but also considerably expands the quality and the quantity of the signs found in man's world. The fact that written words are not as fleeting as those uttered by his mouth or his inner voice enables him to correct a text, to refine it, to reflect at length about the manner of perfecting what he wants to write and wants others to read. Extensive sources can be used, borrowing the words of others, written ages before in remote lands, and the author can at a glance observe the coherence of a paragraph, or its incoherence, inviting him to amend his work. Literacy thus implies a considerable deepening of man's appropriation of the world, as the emergence of new types of creations now become possible in this realm. It not only permits the passing on of texts to future generations. It also expands the horizon of his world, and leads to the

reaching of new heights, the elevation of man, through the building of new works of language, exploiting the benefits of its newfound, earthly foundation.

As a direct consequence of the emergence of literacy, new kinds of languages could then be explored. Symbolic calculus is one of them. It, among other uses, allows man to predict the behavior of the things of the earth and the skies. The movements of the celestial bodies or the trajectories of earthly objects can then be precisely determined in advance. A vast range of predictions and explanations concerning both nature and man can be provided with a few formulas, discovered after sustained efforts by brilliant individuals, empowering man and strengthening his domination of the earth, life, and the skies, through a deeper appropriation of his world. Such calculations would be inconceivable using only speech, as its linearity combined with its presence do not allow man to consider several elements at once and to reorganize them according to a set of rules in real time, whereas writing is ideal for such tasks, as one can contemplate written formulas in their entirety at a glance and reflect upon them, as a whole. The appropriation of literacy thus led to a considerable deepening of man's understanding of nature, but it would also prove itself to be a remarkable means of control of man's own world, his own creations.

Using literacy as a tool to conquer new parts of the word, man then found out that it could not only be used to anchor speech into the earth, but also be used to create entire languages from scratch. Authored like a novel or an essay, a new, artificial language possessing any feature conceivable by a linguist's mind can be taught and learned after having been put into writing, patiently refined to achieve the intention of its author, such as liberating one's world from the limitations inherent to a particular language. Such works may have yet to have a significant impact on man's history, but the seed has already been discovered, and it is waiting to be planted. It may then only be a question of time before large populations begin to live within a purely artificial world, built with an artificial language.

Another kind of artificial language, one not meant to supersede our mother tongue, is nonetheless already present in our world. Designed to control pieces of machinery or transform information, programming languages allow an extremely versatile and precise command of an extraordinary variety of tools with which our world is now built, and this would not be possible if these languages were



not anchored in the earth, and instead rest on the sky or, in other words, it would not be possible without them being put into writing rather than being mere voices in the air. This nonetheless does not mean that the written word surpasses the spoken one.

By being written down, speech is also simplified, deprived of many of its nuances and parts of its meaning. Most written languages show almost no indication of the tone, the rhythm, or the musicality of speech. The identity of a speaker can often easily be determined among the considerable variety of voices familiar to a man, as each word bears the almost unique imprint of his vocal tract, a sign of authorship branded on each sound coming out of his mouth, but this information is irremediably lost when these words are put into writing, showing that it complements speech rather than rendering it obsolete. The impact of literacy has nonetheless been extremely profound upon mankind as a whole, forever transforming the nature of man's world, pervading each one of its parts, with man unceasingly relying upon the earth as a storehouse of knowledge rather than on the memory of his fellow men. Thought to be dangerous, weakening man's mind by rendering memory almost useless as everything could be found in books or scrolls, writing was thus rejected by some, such as the Gauls, as an innovation perverting man's world. Those armed with styluses nonetheless prevailed over those wielding sharp swords, and the world of the vanquished Gauls crumbled into oblivion. Refusing to anchor their world, the work of their mind, into the earth, it was dispersed by the winds with the ashes of its last inhabitants, like a voice briefly heard and then fading into absolute silence. This nonetheless does not necessarily

imply that their choice was wrong, but only demonstrates that they did not want to participate in the great race for the appropriation of the world at all costs, like the rest of mankind.

The first foundation of the part of our world erected using words as its building blocks, spoken language, rests upon the heavenly fluid enshrouding our planet. Our capacity to appropriate and use these ancient constructions created by our distant kinsmen came to us naturally, as we effortlessly were brought into this area of the world by our parents during our first years of existence. If we now look around us, we may nonetheless notice that we are surrounded by signs imprinted on all kinds of materials, parts of the earth rather than the sky. Strings of words still continue to pass through our ears, carried by the aether, but a large part if not most of our world now rests upon the lower realm, the earth, with written characters permanently displayed, filling up our field of vision when we walk down the avenues of our cities, unceasingly catching our attention, inviting us to consider the things of the world rather than take pleasure in the sensations offered to us by the earth, life, and the skies. We may now observe the presence of these earthly signs around us, even within the quietude of our home, seeing how omnipresent these marks have become, how entrenched into the earth, into our lives, these parts of the world have become. We may reflect on the reasons for their presence, on the role they play in our daily life. They may inform us of the nature of an earthly object or be mere indications of their origin. They may be texts inviting us to delve into the world, forgetting the realm of sensations to take refuge in the fruit of the imagination of other men. They may also proclaim the worldly name associated with a part of the earth or an individual, or be signs of ownership. Attentively observing the place of these earthly manifestations of language, we may wonder what our life would be without them.

The acquisition of speech, the celestial language, may have been natural to us, as men evolved to effortlessly learn it during their youth, but this is not the case with writing, the earthly language. We should all remember, even if only through somewhat blurry memories, the years spent on school benches to master this strange art. Carefully reproducing models of letters and words, painstakingly deciphering long lines of written signs, literacy demanded sustained efforts, and the patient guidance of trained teachers. Our present

ability to associate each word written around us with a thing of the world, to perceive the signified beyond the earthly signifier, can be directly traced to this learning experience. Without the strenuous passing on of the knowledge of the meaning of each sign, and assemblies of them, done through speech, these etchings on the earth would now remain a collection of meaningless shapes, parts of the earth severed from the world or only seen in it as purely earthly objects. Let us reflect on the formidably lengthy human chain that transmitted this ancestral knowledge to us, with each generation using oral language to introduce us to the mysterious art of anchoring our celestial language into the earth, without any interruption, thinking of the time of the invention of the characters now surrounding us, and their inventors, whose name have more often than not been forgotten. Let us honor their memory and their work, which tremendously enlarged the horizon of our world.

Placing a written text in front of our eyes, we may first observe this object as a thing of the earth, in its materiality. The characters present a stark contrast with the surface whereon they are inscribed: the meaningful stands out from the meaningless, but we should nonetheless notice how it is the meaninglessness of the plain surface that allows the meaning of the signs to appear and be distinguished. We may then notice how these characters are arrayed on this part of the earth, ordained into neat lines, going in a specific direction, lines that are interrupted by the borders of the object upon which they are inscribed. We may be mindful of the fact that these lines represent time, the work of the skies, represented as an invisible line extended through space, upon the earth, mirroring the nature of heavenly speech. Once the earthly dimension of this piece of writing has been perceived in its fullness, its worldly dimension can then be attentively observed.

The text itself is composed of leveled structures assembled together. Isolated letters or characters can be distinguished, but they are inscribed next to others to form words, elements endowed with meaning in the world, signifiers linked with signifieds. These primary structures are assembled into secondary ones, sentences, and then tertiary ones, paragraphs. Linked with others, each word becomes part of a greater sign, one that is more complex, nuanced, and depicts a finer picture within the world. Going from the smallest element unto the greatest, let us meticulously unravel the bonds between each signifier and signified. Let us meditate on the shape of each character, and on the manner in which this earthly signifier

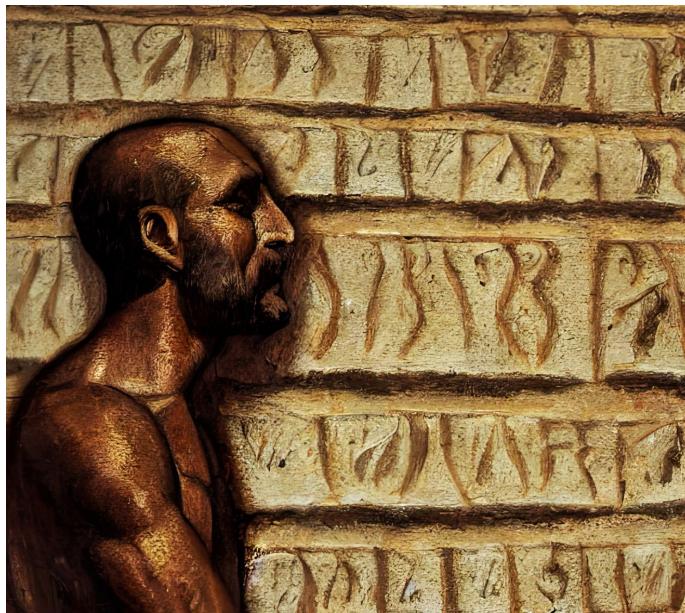
is associated to a heavenly one, how it is read and pronounced as a part of our oral language, and how it is also linked with a particular meaning in the world, representing either an object present upon the earth, part of life, a thing of the heavens, or even a pure concept, an idea existing solely within man's world, within his skull. We may then contemplate the difference between the meaning of each word and the meaning of the sentences that they form, and likewise, notice the way the paragraphs can mean something more than the concatenation of the meaning of each individual sentences forming them. We may rightfully wonder at the marvelously complex nature of our language, and equally, be astonished by the power of the written word, heavenly language brought down to the earth, allowing enormous quantities of highly refined works of language to be preserved as material objects, passing through the ages as the earth continues its endless revolutions around the sun, with texts surviving their authors and even the civilizations having given birth to them, while the voices of every person alive when they were written down have faded into eternal oblivion. We now rejoice as we behold the formidable power of this instrument of the mind, allowing us to appropriate our world like never before, offering us a chance to pass on the fruit of our experiences to men who have yet to see the light of day.

4.2 Appropriating Things with Signs

4.2.1 The Law - Tracing Boundaries in the World

Equipped with language, wielded like a machete, man can clear out new parts of the world and use this empty space to build new things and structures. New things become conceivable, as he now dwells *in* language, things that are nowhere to be seen on the earth or in the sky, but rather only exist as representations, things of the world. One of these things is the concept of “law,” which is a foundation stone of what we call civilization, a defining feature of our kind, distinguishing us from other animals, as such concept only exists within articulated language, mastered by man alone. Laws are means to shape the behavior of men through the use of language. They are assemblies of signs tracing boundaries within the world, cleaving each part of it between two major categories: the allowed and the forbidden. Tracing a series of lines within the world, separating things and adding a new dimension to it, using words, parts of the world themselves, the law is nonetheless more than a purely meta-physical tool. It is rooted in meta-physics, in the immaterial parts of the world, being an assembly of signs found within the human mind, but its influence can ripple through the whole of the world, spreading through man’s action upon the earth, within life, or in the skies. A law can indeed establish invisible boundaries upon the earth, with lands deemed off limits to some men, inaccessible by law, even when they can potentially reach them effortlessly, and those disregarding these boundaries may be punished by those in charge of enforcing the law.

The power of the law is derived from the strength of language. It allows men to constrain the behavior of other men with the use of the tongue rather than the fists and the teeth. Animals are lawless, but they nonetheless also express territoriality, cleaving the earth in two parts: what is theirs and what is not. A pack of wolves may use signs to mark its territory, using the scent of its urine as a signature and a warning to others, a deed of ownership, and they will not hesitate to pierce the skin of intruders disregarding them with their fangs. This behavior is nonetheless not the product of a reflection, nor can other animals understand the meaning of the sign without experiencing the consequences of transgressing the warning. The avoidance of a rival creature’s territory may be the fruit of the play of love and war, natural selection, with those failing to heed the



signs perishing while others thrive. It may also be the result of the experience of the transgressing, witnessing first-hand the attack of the pack on those overstepping the boundaries of their territory. The laws of men are nonetheless different. One can use words to expose the consequences of the transgression without any demonstration, and the law can be adapted immediately to any circumstances. It can be debated, amended, or expanded at will. The emergence of specific behaviors in animals come as the result of the play of love and war, with the behaviors favoring survival and reproduction spreading among their branch of life, but wielding assemblies of signs as a tool, men can shape the behavior of other men with their tongues and styluses, so that their actions would benefit a group or the whole of mankind. Men can immediately see if a law harms or benefits them, whether it strengthens or weakens their group, improving or hurting their chances in the play of love and war, and seeing the words of the law as objects, which can be manipulated, they can work to discover laws that would allow them to reach the goal they set themselves to reach.

The history of man's first laws is irremediably lost, as they vanished with the last breath of those having put them into words, but they certainly reflected some of the most universal constraints placed upon their present-day descendants, transcending eras, lands, and cultures. One of them is incest between ascendants and descen-

dants, which also pervades the animal world, and not without good reasons. What later became an almost universal law, from both a moral and legal point of view, is rooted in the play of love and war, as such behavior not only severely affected the cohesion of the family unit, it also led to the birth of unhealthy offspring, weakening the bloodline of those disregarding this taboo, and thus those refraining from such behavior prospered while those who engaged in it were progressively outnumbered. Here, we have a constraint rooted in the nature of the play of love and war, the growth of the tree of life, which then became a law, part of man's world, when it was put into words, taught to young generations, without them needing to witness the consequences of its transgression. Passed on as tradition, this law then becomes a scaffold of the community, a frame guiding the life of its members, often making it stronger, making its members better actors in the play of love and war, more diligent servants of life. Another core taboo that has now become the source of a nearly universal law is the prohibition of cannibalism, a practice that, like incest, weakens the cohesion of mankind, as it leads men to see fellow human beings as mere prey, ready to be hunted, butchered, and eaten, striking fear in the heart of all, lessening the trust between men, and ultimately weakening the whole that they form. The cleaving of the world induced by the advent of the law therefore not only concerns the earth, but also life itself, separating the family from the potential mate, the edible from the inedible, and countless other categories, in each realm of the creation.

Rooted in the play of love and war, the first laws nonetheless did not emerge naturally. They are the result of the will of individual men, and they would remain vacuous parts of the world, having no effect upon the earth, life, and the skies, without being linked with an authority, being the object of either an agreement between the members of the group to which these laws apply or forced upon them by persons enjoying a superior strength or power over the world. A law is indeed a mere assembly of words if there are no consequences that follow its transgression, but if it is enforced, on the earth, among the living, in the skies, and the world itself, the words of the law become something more than mere words. They then become a scaffold of the world, constraining the life of men, guiding their footsteps as well as their thoughts, having a tremendous effect on all that *is*. Man shapes language into law, but the law in turn shapes the whole formed by mankind. Intertwining the power of language with the earth, life, the skies, and the world itself, the law

is a formidable tool that changed the course of life forever, having left visible traces all over the earth, with the frontiers of the world appearing as walls and fences on land.

The law is a tool, a weapon wielded by man to resist and even oppose the flow of nature. It unites mankind, reinforces the bond between men, allowing them to pour out the product of their work of reflection and creativity, what they built in the world, over the earth, within the living, and in the skies. It represents a flux running from the world to the other realms, through the actions of men agreeing to become the instruments of the law, ensuring both that it is not transgressed, and that those disrespecting the boundaries it defines pay the price of their opposition. The nature of this flux is manifold, reflecting the nature of each one of the realms into which they run.

Through the appropriation of new, freshly cleared parts of the world by the law, man can further appropriate the earth, life, the skies, and the rest of the world itself. Upon the earth, the words of the law lead to the emergence of countless frontiers and borders. Certainly among the first laws are those allowing ownership of things belonging to the earth, including land itself. They induce a great movement of appropriation of the wealth of the earth, with men striving to own material things. Their labor is recognized by the group, and the products of their efforts are respected by others, encouraging them to continue their work. As their existence becomes more comfortable, their life more secure, they can accumulate and store things while living under the protection of the law. They normally no longer need to defend the fruit of their labor by force, as is the case among other animals, but they benefit from the force of the law, which recognizes these things as their possessions. The concept of "private property," so fundamental to civilization, can therefore be seen as a particular use of language, wielding it as a tool of the world helping man appropriate the earth.

The strength of the tongue, the power of language, can nonetheless also be used to appropriate the living, including man himself. The law can be used to constrain the behavior between men, as with the aforementioned taboos, incest and cannibalism. It can also become a tool of subjugation, allowing men to appropriate their brethren as property, leading to the appearance of slavery, the use of the law to separate mankind between free men and those owned by others, mirroring the ownership of the things of the earth. Tool of edification of civilization, the law thus swiftly was wielded to oppress

and submit, unraveling the cohesion between men that arose with the advent of other laws, such as those prohibiting behaviors damaging the trust between family members or those preventing men to prey on other men. The law can be used to control and restrict life. It may give anyone the right to restrain the movements of another member of their community, to imprison him in the entrails of the earth, or even the right to hurt his flesh, to maim his body, and to extinguish his life. More powerful than the sharpest sword or the strongest warrior, the law is thus respected and followed. It can bring a man's life to an early end, with the uttering of a few words or a brief scribbling on a piece of paper.

Likewise, the words of the law may trace an invisible line in the firmament, dividing the things of the skies according to a vision found within man's world and expressed within language. Access to the heavens may be restrained or allowed by the law, and even the right to stir up waves in them may be denied, as it is now the case with radio waves. The brazenness and greed of man knowing no bound, he may even use this tool of the world to proclaim ownership of any celestial body, even those that will forever remain out of his reach, as long as it exists within his world, being represented as a sign, often bearing a name.

Finally, the law may even be used to appropriate other parts of the world itself. The access to parts of the world having few attaches to the earth and the sky, meta-physical things, may also be restricted by law, and these things of the world may also be possessed like objects. The spreading of ideas or the reproduction of works built with language may be forbidden. Lines of separation are also drawn by laws upon the world itself, setting aside what can be said or thought from what cannot, what can be copied freely from what demands a permission. Even the law itself may be kept sealed, with only select people authorized to know its content.

From the depths of the ocean to the farthest stars dispensing their brilliance throughout the celestial vault, from a single spoken word to entire volumes of written texts, the reach of the law is thus boundless, covering all the realms forming man's world. This tool thus pervades all that is known to man, but it also stands against nature itself. The only laws constraining the earth, life, and the skies before the advent of those devised by man were the so-called "laws of physics," the scaffold of the universe, giving a structure to the skies, as space-time, and the earth, as matter, with life repre-

senting a phenomenon affecting the latter. Like a torrent channeled within a deep canyon, the earth is carried through the skies; matter is borne through space and time, following a path traced by the laws governing the universe. Man's laws are meant to resist this flow of nature, to impose a new order, which would fit his vision of what the world around him should be. He intends to replace the apparent lawlessness of nature, including life, with a world constrained by his will, with randomness or the uncontrollable progressively chased away from it, hoping to foster his own prosperity. By bringing order to the relationships between men living in close proximity upon the earth, man can indeed avoid bloodshed and conflicts, which ineluctably lead to losses of lives and the wasting of the products of his labor. A man living alone indeed has no need of the power of the law, but a community can grow stronger if its members are constrained to go against their own nature, to resist their natural instincts, so that strife may be avoided, so that trust be nurtured, and so that peace may prevail among them, thus allowing everyone to benefit from the strengths of others, seeing them as partners, friends, or family, rather than prey, enemies, or competitors.

Opposition to the flow of nature thus represents the foundation stone of civilization. This not only includes a resistance to the forces of the earth and the skies, with man appropriating these realms to resist their wrath, it also and perhaps foremost includes a strife against life itself and man's own animality, his belonging to the tree of life. Certainly one of the most fundamental laws found in most civilizations is the one ensuring that women would not be forced to mate against their will, or the will of their parents. Males are thus constrained by the law to resist the urges imposed on them by life itself, to resist their own nature pushing them to mate with the fittest females, making them play their part in the play of love and war driving the growth of the tree of life. The fruit of man's mind, such law, such constraint imposed on mankind, has a tremendous effect on the play of love and war as a whole. Hindering uncontrolled expressions of "love" through the law, man prevents manifestations of war. Without this tool of the world, men would be like beasts, with males constantly fighting to appropriate the bodies of females and extend their bloodline, but living under the protection of the law, the physically helpless and the weak are offered chances to win the heart and the flesh of members of the opposite sex. War remains. Competition for mates is unabated, but the play is now unfolded on another stage. The earthly dimension of mankind becomes less



relevant, as strength of the body or stature plays a less important role for those living under the law, whereas the worldly dimension becomes more prominent, as fitness can now be expressed with the tongue or with wealth, also protected by the law.

As a result of the influence of man's law upon the great play of life, the presence of new constraints, peace may reign among men and the absence of war implies an absence of selection of those having the fittest bodies, in favor of those having other qualities, such as a mastery of the ways of the world, making them able to acquire prestige and status in it, valued by lovers. The law also positively selects those obeying it, as those opposing it may see themselves deprived of any wealth, of their freedom, or even see their life brought to an early end. Without war, the body of man thus grows weaker, as his mind becomes sharper and more obedient, reflecting a shift of values tied to the rise of civilization. The peace brought by the law thus favors the rise of love, as men have greater chances to live long lives, and safety and trust facilitates the emergence of loving relationships between men and women, leading to the birth of an offspring protected by loving parents. Love and war are therefore both constrained by the law, transformed, guiding the growth of man's branch of the tree of life toward a new direction, but the creature seldom bothers itself to consider where it may lead its descendants.

The impact of the law upon the great race for the appropriation is equally tremendous. The safety brought by it allows even the men with the weakest bodies, the dullest minds, to hoard things without restraint, when they would swiftly be deprived of them by thieves without its protection. The advent of private property allows

them to amass countless things of the earth, locking them inside a part of the earth that they own, knowing that others have no right to take them and may be punished by others for doing so. Greed then pervades the world of men like never before, as all are racing to own more than they need, seeing wealth as a sign of fitness, of superiority, puffing up their ego and convincing them that they are the main actors of the play of love and war. The law may encourage greed and the uncontrolled pillaging of the resources of the earth, life, and even the skies, but its power may nonetheless also be used as a means of protection of nature, by men wise enough to know how much their own lives depend on it.

The law is a sword. It cleaves the world between the lawful and the unlawful, the allowed and the forbidden. It can crush those guilty of transgressing the boundaries traced by it, but it also can protect, safeguarding what is designated as off limits. Wielded by the sagacious, it can be used to defend nature against the aggression of the greedy, the carelessness of the febleminded. It can accompany the flow as well as it can oppose it. It can prevent men from frantically pillaging the wealth found in the depths of the earth, from destroying the beauty of its face, or from soiling its skin with the dross of their world. Life may also prosper under the umbrella of this man-made tool, as it can trace a barrier between the poachers and the vulnerable branches of the tree of life, defending threatened species from being extinguished by bullets or arrows. Parts of the world itself may at times also be preserved by the power of the law, with freedom of speech being sometimes guaranteed by it, ensuring that men could continue their work of edification of their home, and it may at other times be restrained by it, with the forbidding of ideas or words that may threaten lives, men, or even threaten to topple the tallest structures of the world itself, menacing to hurt the whole formed by a community. Finally, even the immensity of the sky may be shielded by the words of the law, as it can thwart attempts to contaminate the air with pollutants, products of man's industrial work. It can bar unscrupulous men from veiling the firmament with opaque smoke, or from flooding the night sky with brilliance eclipsing the gentle glow of the stars and thereby severing men from contact with what may be the most impressive spectacle offered to us by nature.

The sword of the law can save or maim, depending on the behavior of the one wielding it. Its power is in the hands of the lawmakers, who may represent the whole of a people or a small minority, de-

fending their own interests while exploiting other people. Expressed with words, thrown into the air or inscribed on the earth, the advent of the law represents a new turning point in man's race for the appropriation of the world, showing how the use of language can lead to a metamorphosis of this world, clearly visible on the earth, among the living, and in the heavens.

Every day, the air enveloping us carries the words of our brethren into our ears, helping us weave stronger bonds with them. The brilliance of the daystar and the flames of our lamps, in turn, bring the letters they traced upon the earth into the depths of our eyes, offering us occasions to see the world through their eyes, transcending the work of the skies, the passing of time and the extension of space. The astonishing force of the sign nonetheless allows it to do more than merely fashion our vision of the world. Words can shape the earth, life, and the heavens themselves. The laws enacted by our fathers certainly are among the most impactful words ever uttered, leaving deep traces in almost every part of our surroundings. Attentively observing a village or a city bordering a vast expanse bearing few traces of the hands of man, we may be struck by the contrast offered by such a spectacle, with the living space of our species showing a different order, rectilinear shapes, sharp angles, and flat surfaces, standing against the harmonious, fractal irregularities of nature.

Observing more closely the work of our hands, these streets allying concrete, tar, metals, plastics, and various shades of pigments, we may then attempt to discern the effects of laws upon this part of the earth. The heights of the buildings surrounding us, the width of the roads, or the direction taken by the vehicles flowing in these paths made of asphalt were all determined by the words of the law. Let us observe the marks of the law upon the things of the earth present in front of our eyes, from the objects found within our home unto the very structure of our metropolises. The earth bears the marks of the law, upon a large part of its face, and realizing this effect of the law, we may stand in awe while contemplating the might of our words, the strength of our tongue and our pens. We may then take a moment to transform the vision we have of our surroundings, letting the work of the law progressively be unveiled and appear, superimposed upon all these things found within our world, each day of our lives. We may also imagine what this city would look like without the order brought on by these words of might, with anarchy

reigning supreme among men, showing us the value of restraint and constraints imposed upon our use of the earth.

Our gaze should nonetheless not only be fixed upon the earth. The tree of life also flourishes upon it, and the law is like a mesh of steel wires supporting the weight of its branches, guiding their growth toward a predetermined path. Reflecting on our own nature, as living things thrown into this world around us, we may ponder on the boundaries traced by the law in it, boundaries constraining our movements, dictating our behavior, toward both the earth and life. Which part of the earth is off limits to us? What behavior would be unlawful toward other living things, other men in particular? The power of the law, be it moral or civil, compels us to forgo our most deeply entrenched instincts, such as those inciting us to participate in the play of love and war. We cannot enter into contact with what our flesh craves, in acts of love expressed for the perpetuation of our kind, without permission or in some cultures without sealing a marriage with the stamp of the law, be it divine or man-made. We may not let our rage and envy be manifested without restrain, waging wars against others, which would lead to a ruthless purging of mankind without the support of the law. We may imagine what we, and our brethren, would become without this invaluable guidance, these barriers, erected with words inscribed on paper or passed on from mouth to ear. The order prevailing in front of us, civilization itself, stands upon the word of the law, as upon a wide foundation made of the sturdiest granite. The constraints placed by this tool of the civilized man nonetheless extends beyond what we can do. It also enjoins us to dress in a certain way, to shape our appearance so that it would fit certain norms. We may only be naked out of the view of others, and venturing in the city implies the covering of certain parts of the body. We may now ponder the nature of the laws under which we now live. Looking at ourselves, we may consider how they affect our appearance, just as they constrain our behavior. What kind of attire or sign would lead us to contravene the law of our land, and what would the consequence of a transgression be? We may take a moment to reflect on the limits traced upon life, and ourselves in particular, by this sharp sword that is the law.

The reach of the words cleaving the world is nonetheless not limited to the realms experienced by the senses. The sword of the law also cleaves the innermost parts of the world, what is only experienced with our reason, what transcends the earth, life, and the skies. Turning our attention toward our inner world, and especially

the very medium of the law, language itself, we may examine how it influences what we think about, what we say, or what we write. We may reflect on the way it can bind our tongue, preventing us from uttering words that are taboo, deemed dangerous, so potent as to lead us to lose the fruit of our labor, our freedom, and perhaps even our life. We may consider the price paid by so many of our brethren who dared to transgress the law by their writings and their speech, at times threatening with their tongue or their pen to topple the largest structures erected within their world, for the better or for the worse. What opinions, ideas, or words are now barred by the law in this land wherein we now live? Does this interdiction protect or hinder? Does it hamper the edification of the world or rather foster healthy growth? Let us contemplate the boundaries built by the law within our language(s), and see how words are used by our mankind to curb the use of other words, and discern how the tools of the world can be used to transform the world itself.

Raising up our eyes, we are then invited to realize that the reach of the sword separating the allowed from the prohibited, the authorized from the forbidden, extends even up to the highest heavens, with language cutting the firmament into multiple things bearing names, while the law separates these celestial things with boundaries made with words. If the clarity of the sky has been preserved, and if the air we breathe is pure, it is because the words of men defend the upper realm from the greed and unscrupulousness of other men, from the frenzied edification of the world that causes the pillaging of the riches found in the entrails of the earth and the pouring out of masses of sooty fumes and invisible poisons into the translucent reservoir of air from which we draw our breaths. We may ponder how the firmament would appear to us without the protection of the law. The brilliance of our star may be completely veiled by unrestrained works of construction, hiding the sky behind concrete, enshrouding the celestial vault with a cloak of darkness by flooding our eyes with artificial radiance, irremediably severing our bond with the greatest of all the realms of nature, denying us the wondrous sight of the twinkling diamonds of the night. Even our ears would not be spared from harm, as floods of sounds would invade the air, preventing us from finding refuge into the world of sleep when the sphere of fire has retreated beyond the skyline. Let us appreciate the order brought on by the law, on the earth, within life, in the world, and even up in the skies, as it reins in the uncontrollable growth of the world while ensuring it healthily grows.

4.2.2 The Institution - Structuring the World

The tree of life, to which we all belong, is an organically growing structure, composed of a multitude of individual living things, each one of which endowed with a unique nature and distinctive properties. This individuality of all living things, combined with the singularity of their predicament, the fact that they are thrown on a precise part of the earth, at a determined stage of the revolutions of the heavenly wheels, history, implies that the interactions between these living things will ineluctably be unequal. Certain beings will be given more by nature than others, and as a result, natural hierarchies will tend to form between creatures able to actively interact with others, such as animals. Structures invisible to the naked eye thus emerge, forged in their world, supported by the networks of nerves pervading their bodies. Leaders appear among packs of lions or wolves, not chosen for their wisdom by their members, but rather by their strength and their capacity to dominate others. A new order surfaces in the world, with the structures defining this order being themselves the fruit of the play of love and war. The groups developing the structures benefitting the whole that they form then have an edge in their strife against their rivals, and they will be more successful actors of the play of love, leading them to have more numerous and resilient descendants. Thus do the ants, so feeble and minute, occupy a large part of the entrails of the earth and have passed through the ages, their chthonic dominion left undisturbed. Their highly structured life and communities are a flagrant demonstration of the power of the play of love and war, which can lead to the emergence of complex societies, without any decision being made by any individual, without any will, considerably enhancing the capacities of this branch of life to overcome any trials, coming from either the earth, life, or the skies, with individuals even being led to forego their instinct of reproduction or survival, sacrificing themselves for the sake of the whole to which they belong, with worker ants never passing on their genes and tirelessly laboring for their queen.

Among our own species, hierarchies that are the fruit of nature rather than the product of our work may still be observed. The most fundamental of them certainly is the imbalance of power between parents and children. Heavily relying on their genitors for several years after their birth, and being inferior to them in wit, knowledge, strength, or endurance, children are condemned to submit to



their progenitors. Other kind of structures also exist among us since immemorial times, naturally constraining our behavior and bringing a certain order to the communities formed by groups of men. One of them finds its source in the differences between males and females, leading to different roles assigned by nature itself to each one of them, notably because females are considerably weakened by the burden of child-bearing, thus leading to a natural tendency for males to impose their authority on the family unit, as they, at least before the advent of modern technology, were most able to secure food through hunting and to protect their home from threats, having all their strengths available for these tasks. These fundamental structures found in man's world are the fruits of the play of love and war, and they predate the appearance of language among mankind, but this new tool wielded by him would soon prove to be able to bend the strongest and most ancient of them. The power of the law, in particular, can indeed not only be used to transform the structures offered to us by life itself, to improve or oppose the flow of nature, but also to create new ones from the ground up.

The law can constrain the behavior of man, and by combining sets of rules and norms, forming secondary structures using words of law as building blocks, he can construct new frames precisely guiding the interactions between men, as well as men's contacts with the earth, life, the skies, and the world itself. Institutions, that is, structures standing up within the world, built up by man himself rather than the fruit of the play of love and war, can now be created. The law can not only limit one's movements or prohibit certain acts, it can also become a tool of edification, a means with which one

can express his creativity and bring a personal vision to reality, as something existing not only in the world, as a meta-physical idea, but rather as a set of ideas that bear fruits visible on the earth, in life, or the skies, with men made of flesh and blood implementing these ideas, playing the part assigned to them in this man-made structure, accepting to follow the rules defining it. By being followed, these sets of laws and rules transcend the world and they become part of the earth and life, as they constrain and guide the behavior of the members of those institutions.

Institutions represent structures of the world that are reflected upon the earth through man's actions. One of the most rudimentary and ancient of them may perhaps be marriage. It represents a covenant, uniting two people by the law, making them the core of a family unit, assigning them roles to play as husband and wife, and once they have assumed their part in the play of love, they are destined to become also the father and mother of their children. This institution, unknown to other animals, was deemed necessary across the peoples populating the earth since the dawn of civilization because it strengthens the bond between parents and between parents and children, especially constraining the male so that he would take upon himself the responsibility of providing for his wife and children, rather than obey his instinct pushing him to continue to strive to find other suitable females with whom he could mate. This man-made institution is meant to calm the play of love and war, ensuring peace among the group, ending the competition between people once they have found a partner with whom to create a family, even though lust or love may lead to transgressions, to a destruction of this institution, and to a severe punishment if the law prescribes it.

Institutions reflect the life of those establishing them, and as communities of men grow organically, driven by the play of love and war, they likewise evolve, reflecting this growth. With new generations being born, the family structure is enlarged, and new roles are created: grandparents, siblings, aunts and uncles, with these roles and the duties associated to them being defined by each community, varying widely among the peoples of the earth, even though the nature of life itself still constrains these structures, because of the contrast of the sexes or the one between progenitor and progeny, for example. The fact that they raised the new generations gives the elders a natural authority, as they engendered new human beings and exerted a supreme authority over them during all their childhood,

when they were completely dependent on them. When families grew in number and turned into tribes, the elders therefore found themselves in an ideal position to become the lawmakers of their world, those wielding the power of the tongue and the stylus to establish the rules of their community, to create a frame that would ensure order and peace among them, and allow the whole that they formed to survive the trials of nature, the threat posed by other men, and allow them to prosper. Ceasing to be a mere pack of wild creatures ruled by the “law of the jungle,” like other animals, men slowly built-up structures made of words that constrained the behavior of a limitless number of men, a government, establishing a rule of the law. Under such a regime, the lawmaker may be more powerful as a king, as a kingdom itself rests upon the authority of the king, itself established by the law enacted by the lawmaker. Even kings may live under the yoke of institutions and laws created by others, showing where true power lies. Enclosed within high ramparts, sealed from the lawless open country filled with “barbarians,” men refusing to live according to the laws of their world, tribes then formed the first city-states, marrying a world made of constructions of clay, stone, or wood, with institutions built with words, laws, and rules, establishing an order, a world visible upon the earth, under the sky, governing those living within its frontiers.

A government thus represents a man-made institution, rooted in language. Words are assembled into laws and rules, and these are in turn assembled to form a coherent whole, a structure within man’s world that gives a status, a role to play to all those living under it, offering them rights while demanding the fulfillment of duties, constraining their behavior while ensuring that a particular kind of order is maintained, for the prosperity of the whole or for the benefit of a select few. Wielding words and laws as a tool that they have learned to master, men can now decide to give power to every member of their state to decide of the fate of the whole that they form, or they can use the law itself to seize power and ruthlessly oppress those forcefully living under its yoke. Charisma and influence then prevail over muscles and sharp weapons. Such an institution is rooted in the world, as a series of laws arrayed to create a coherent totality, but it also is associated with signs giving it an identity, allowing it to be discerned from other governments, signs that may float in the sky in the form of colored banners, may resonate through the air as hymns celebrating a motherland, or may be seen upon the earth as a frontier traced in the soil, with landmarks

and walls marking the space where its laws are in effect. Nations are first born through a blood relationship, but they then take root in a specific part of the earth, a land they occupy and possess. They also represent a unique world, with a particular language, a tradition, and a specific set of institutions. Each one of these aspects of a nation becomes part of the identity of its members, part of who they are. They see the earth, life, the skies, and the world through the lens formed by their world, shaping the way they experience life.

Institutions were first rooted in nature, constrained by the differentiations between men resulting from the nature of life itself, such as the opposition between progenitor and progeny, or the one between males and females, but they soon evolve, organically, and give birth to various kinds of “organizations.” Existing in parallel with a government, men then begin to form new institutions, also built with rules and laws, but whose range of action is more limited. Religious orders are created around sets of beliefs and moral laws, which may complete those established by a government, or compete against them. Guilds, clubs, and associations also represent man-made institutions, finding their origin as a compendium of rules forged in language, in man’s mind, his world, and then through the actions of men being reverberated upon the earth, life, and the skies. Linked with trade, private companies then appeared, as institutions whose main goal is to produce wealth for their leaders or owners. Existing within the frame offered by the supreme institutions, the state, these organizations allow men to unite their minds, their efforts, or their wealth to reach a common goal, assigning specific roles to each one of its members.

Institutions thus represent a new step in man’s great race for the appropriation of the world. As he furthered his mastering of language and laws made with it, he can now at will create secondary structures made of rules and laws to form institutions, coexisting in parallel, imbricated in one another like Russian dolls, and in turn, this new tool, this invention, can then be used by him to deepen his appropriation of the earth, life, other parts of the world itself, and even the skies:

- Institutions may appropriate parts of the earth, allowing them to occupy and restrict access to a piece of land to whomever they chose. The hierarchy in their midst may also be reflected on the earth, with leaders occupying the highest floor of their headquarters, with spacious offices and enjoying a view of the skyline, domi-

nating their brethren, while mere workers are cramped in the lower parts, closer to the ground than to the heavens, deprived of the joy of beholding the splendor of the sun. Each one of their members nonetheless can enter premises that are forbidden to other men, and enjoy the benefits offered by the statutes of the institutions, with monetary rewards compensating the fulfillment of duties toward the whole that they form.

- Institutions may also appropriate life. They may treat their members as tools to be used to achieve a purpose, assigning them duties in exchange for rights. Their daily life may be shaped by the rules of the institutions, pushing them to follow rituals, to perform certain actions that do not directly benefit them. The hierarchy of the organization represents a chessboard, with a game continuously being played, by the king, the knights, as well as by the pawns. The organization appropriates its members, but these members also relentlessly strive to climb up in the hierarchy, to win the game of roles, wanting to appropriate others and hold the power of the institution in their hands rather than be mere servants of the whole. Those steering the organization can indeed exert a tremendous power over its members, and they can thus use living beings as tools, extensions of their bodies, so that they would help them succeed in their endeavors, which is for most men only to get ahead of others in the play of love and war, like any other living thing.

- Institutions are themselves products of the world, meta-physical creations whose influence is reverberated upon the earth, within life, and in the skies, but they may also allow a further appropriation of the world itself. They may indeed be used to foster the spreading of ideas and ideologies among the dwellers of a world, leading to a conquest of heart and minds through the efforts of its members. They may even shape the language used by other men, members or not, by creating and promoting new terms, carrying tailored meanings linked with the values of the institutions. Introducing rituals, signs, and ideas to those in contact with its members, its influence may reach the confines of the world, mankind as a whole, shaping the being of countless beings through the power of the organization, forged with gatherings of signs.

- Finally, institutions may even embody an order found in the highest heavens, transcending the realms experienced by our senses, with laws considered divine, coming down from the skies. Their members may consider themselves supreme, towering over nations,



governments, and all other forms of earthly institutions, as they think of their institution as representing the very frame of the creation, the fundamental structure of being. Establishing themselves as leaders of such heavenly institutions, men see themselves as endowed with a celestial authority, transcending the earth, life, and the world itself, as they use the tools of the world, institutions erected with words and laws, to elevate themselves above other men, above other living things, and perhaps even above the creation itself.

Government, corporations, or churches all represent worldly structures, built with signs by men dwelling in this world. Their creators use these institutions to further their own work of appropriation, but many men are thereby appropriated by those in control of them. Furthermore, these institutions frequently outlive their makers, becoming entities existing independently of any man, continuing to appropriate the lives of those caught in their grip, using them as expendable tools to achieve a purpose determined by men who have since then returned to the earth. The institution can thus empower men, uniting their strength and offering them protection, as well as enslave them, appropriating their time and efforts. As a result of the advent of such worldly structures, men enjoy a greater safety than their ancestors, but they have lost some of their freedom, as no habitable part of the earth is now out of the reach of the law, of a government. A tribute must be paid to it, and in the event of war, one's life may be sacrificed for it, without the citizens having any right to refuse to see their lives taken for the benefit of a worldly structure. Organizations allow us to tighten our control of the earth, life, the world, and the skies, but they also control ourselves, our

movements, our lives, and even our minds. Men nonetheless remain the builders and destructors of the world, and what their ancestors edified, they can transform or raze. They still have the power to liberate themselves from their own creations and exert this incredible power to assist them and reach the destination they want to reach at the conclusion of their lives.

With a myriad of worldly threads forming a tight web invisible to the naked eye, we are at all times connected to the members of our family, our colleagues, or our countrymen, with numerous hierarchies overlapping each other, intertwined to form the frame of our world. We may examine our place within our family, as we submit to the authority of our ascendants, and exert ours upon our descendants, living within an order largely established by life itself. If we consider the nature of our homeland, the symbols defining our country in contrast with others, we may nonetheless see that this institution is of a different nature. All of these signs are the products of man's imagination, and the state itself is an institution having no root whatsoever in the earth, in nature, but rather represents a construction, a pure creation of man's world. It represents the supreme institution, the foundation of our civilization, an astonishing use of vast assemblies of signs, words and laws in particular, to impose an order in a part of the world, and through the actions of its inhabitants, to see this order reflected upon the earth, within life, and in the skies.

We may now consider the earth, how its surface has been cut into innumerable lots, each one representing the dominion of a government, a man-made institution that outlived all the men having contributed to its edification. We may reflect upon the origin of our government, its extension through time and space, that is, its relationship with the work of the skies, the revolutions of the celestial wheels, while also considering the nature of the part of the earth subjected to its rule and its rules. This government is incarnated by legions of workers laboring to preserve the order it imposes upon those dwelling in this land. It also is embodied in the public buildings where they spend their days, in the streets and the public lands that are tended by them, for the benefit of the whole of the people. This order is established and preserved by the power of sets of rules and laws, assembled to form this institution passing through the ages, with each one of the workers embodying it being replaced

after a few revolutions of the earth around the sun, as they go back to the soil whence they came, while the whole to which they contributed stands, supported by a new generation. What has been our contribution to this institution? What have we given to our country? We may also examine our past and see what it has given us, before reflecting upon what would our life be without the protection that it gives us, shielding us from the wrath of men and nature.

Looking around us, no matter whether we stand on a crowded alley or are lying down on our bed, we may notice the presence of numerous signs representing private organizations: brand names, logos, or advertisements. These are the marks of institutions, associations, or corporations born within the frame provided by a government. Observing each one of them, we may be mindful of the purpose of these organizations. Is their *raison d'être* the mere accumulation of wealth for their owners, or do they aim at benefiting mankind as a whole? We may devote a large part of our lives to serve one of them, bartering our existence and our labor against the means to feed ourselves, to find shelter, and to be able to get others to serve us with their labor in return. Considering the largest of these organizations, we may try to picture their origin, beginning as a mere idea in the mind of a single man, and then organically growing, spreading from the world to the earth, from the immaterial to the material, as it occupies buildings and land, penetrates into our life, with employees hired and working for its edification. This structure even inserts itself in the work of the skies, as it passes through time while each one of its members is progressively replaced by others, becoming in effect immortal. Corporations thus utilize the bodies and the lives of the many to produce and accumulate riches for the few. Let us consider how some men, leaders, wield the power of institutions, derived from language itself, to appropriate the existence of those around us. Let us contemplate the incredible power that these corporations and their owners exert upon our world, upon our kind, pondering whether these institutions benefit them or impede their development.

We may nonetheless take conscience of the fact that we also can wield the tremendous power of institutions. We can create one of them to help us fulfill a purpose dear to our heart, finding others to join it, through persuasion or through the distribution of coins of gold and silver. The first step is to clearly see how this power pervades our world, and how others use it. Once we can see with our own eyes the intricate web of relationships, the pyramids of

hierarchies made with men, we may begin to build something of our own, appropriating this new kind of worldly tool and wielding it like a wooden stick, empowering us, allowing us to cease to be a mere pawn used by other men, to command others without it being for the puffing up of our ego, through wealth and prestige, but rather to steer mankind toward its destiny, to elevate our branch of the tree of life toward new heights, forgetting oneself in the process.

4.2.3 Money - Trading in the World

As man explored the depths of his world further and further, appropriating new parcels of it, using his mind to create and manipulate signs, as vigorous arms wielding sharp and sturdy tools to clear out new land, he acquired the means to elevate this world to new heights, profoundly transforming his life. Signs were combined into laws, and laws into institutions. The concept of property and right to possess then naturally emerged. Men began to compete for the countless things found between earth and sky. They started to hoard the wealth of the earth, the fruits of life, and grew fond of counting these countless things, assigning a number, a special kind of sign, to the extent of their possessions, measuring its extent with signs. Constrained by life itself, their own body, they used their ten fingers to count, from which the base-10 counting system still in use today is derived. Exchanges occurred between men, with those having certain skills, for hunting, gathering, herding, or cultivating, trading the fruits of their labor against those of other men. Barter thus arose, and men gave a determined number of things in exchange for a different number of something else, sometimes not paying immediately, with both of them keeping an account, in their mind or as a sign etched on the earth, even before the invention of writing, such as notches on a wooden stick. Numbers therefore grew in prominence within man's world, being associated with all the things possessed or simply present. Barter also appeared between tribes, with resources abundant in a part of the earth being transported to others, where they are scarce and needed. Such trades nonetheless had drawbacks, such as the fact that one had to possess something of interest to the other man in order to obtain something from him. Someone laboring for the fostering of life, a herder or a farmer, would also only possess perishable things, which cannot be hoarded for a long time or be transported across vast expanses without losing their value. He then needs to trade the perishable product of his work for

something else, something that would resist the work of the skies, the passing of time and prolonged contact with the winds.

The things that are most needed by men are the fruits of the tree of life upon which they feed daily. They are the plants, the fungi, or the animals allowing their bodies to remain living, burning like a fire, miraculously in motion and standing above the face of the earth, erect and pointing toward the heavens. These things are nonetheless easily corrupted by the air and moisture of the sky, the dust and water of the earth, in addition to the myriad of minute beings feasting on them, rendering them putrid. Fortunately, man noticed that some of the remains of past living things, made from the essence of the earth itself and patiently grown into harmonious shapes pleasant to the eyes, were not subjected to the corruption brought on the work of the skies. Shells thus began to be traded against food or earthly objects, progressively leading man to turn his look downward to search for something more durable, more resistant than these remains of other living things.

Unlike the fruits of the tree of life, part of the wealth found in the entrails of the earth not only did not let itself be corrupted, but it would also resist being crushed by the fingers or hoofs of living creatures, or being shattered by being dropped upon the earth. Substances found among the mud and the dust, in the soil, could be passed on from generation to generation, unscathed by the assaults of the skies, unaffected by the turning of the heavenly wheels. They could resist the attacks of both life and the skies, endowed with the stability and resistance that defines the lower realms upon which man and all that he builds stands. Stones and crystals began to be valued and exchanged against livestock and crops, but a new step was taken by mankind when metals began to be traded for all kinds of goods, services, or even living beings. Gold certainly was the first, as the malleable metal was easily melted and cast into molds of varying shapes and volume. It does not let itself be corroded by air or moisture, and it can be repeatedly melted again to be renewed and turned into a new shape, even after all the goods that were exchanged for it have crumbled to dust and been reclaimed by the earth. Not as rare as gold, and more prone to being tarnished by the work of the skies, silver also became something valuable, exchanged against all kinds of things. These metals soon became references, to which all things traded were compared, but this implied a prior invention: the quantification of the things of the earth.



Even before the discovery of metals, techniques had to be devised to trade things that cannot be counted directly, such as liquids like oil or wine, or only very laboriously, like grains of wheat or rice. Unable to count the earthly thing itself, man resorted to filling vessels of fixed volume with these substances, using the capacity of the vessel as a reference unit for counting and trading them, or comparing their weight with a set of standardized objects. Man thus created units of measures to trade what cannot be counted directly. This work of quantification of the things of the earth was later extended. It was used to establish standards for the casting of ingots and the minting of coins, each representing a fixed weight of silver or gold, progressively leading to the emergence of a secondary kind of references, not used to measure the weight or volume of various things of the earth, but rather their value. Once a standardized quantity of metal was minted into countable objects, bars or coins, the value of any thing can then be established relative to these objects used as references. One can decide to trade a cow or a barrel of oil against a specific number of these metallic objects. Each thing can then be valued in terms of a number of these coins or ingots made of silver, gold, or another metal, marking the invention of money.

More than pieces of silver, gold, copper, or bronze, money is foremost a tool of the world, a way to look at all things through a prism that assigns a numerical value to each one of them, one defining its monetary value, originally based on another recently emerging dimension, the one seeing the same things in terms of units of weights, size, or volume. The quantification of the world according to a monetary value thus follows the quantification according

to their physical properties, that is, their characteristics relative to the earth and the skies, matter and time-space. The second great quantification of the world leads to a deep transformation of man's way of life, and the way he sees all things. This shockwave rippling through man's world first concerns earthly objects. Money is exchanged against things belonging to the lower realm: earthly coins are exchanged against material objects, such as grain, tools, meat, or fruits, but man soon discovers that the actions performed by other men may also be valued, a number of coins of silver or gold may be assigned to them, and thus people began to trade their efforts, their bodies, or their minds against pieces of metal. Their own lives could now be valued in terms of what a lifetime of their effort would procure them. Their existence could now be seen as a small pile of shining blocks of metal. Even things purely belonging to the world, such as knowledge and ideas, could now be associated with a monetary value and exchanged against coins or ingots. Only the skies seem out of reach of man's fever for money, as no one has yet put a price on the moon, the sun, or the other stars shining in the firmament, but for how long?

The concept of value nonetheless remains a purely worldly and human one. The most valuable piece of earthly matter would certainly be deemed worthless by most living things. An ant colony would go through great efforts to retrieve a lump of sugar to its queen, but it would pay no attention to the most beautiful jewel extracted by the hands of man from the flesh of the earth. The second great quantification rippling through the world is also an unceasing event. It is a series of countless waves propagating through each part of the world, with the monetary value of all things being continuously reevaluated and seen slightly differently by every dweller of this world. This dimension is also itself manifold, as different references are used in parallel at all times, and each thing can be valued according to each one of them, and can still be compared to any other thing directly.

Even without any marking on its surface, each piece of metal is thus more than an earthly object. It is also a signifier, a thing pointing out to another, present in man's world. A gold ingot is largely meaningless and valueless as a mere piece of metal. It cannot be directly used to satisfy man's most essential needs. It cannot be eaten to sustain his body. It cannot help him perpetuate his bloodline and satisfy his lust. It cannot shield him from the wrath of the skies or protect him from the harshness of the earth. Even forged

into a weapon, this piece of gold and silver would be less efficient than flint, less resistant than iron. The value of this precious metal resides in the fact that it re-presents a quantity of food, a piece of land, the time and efforts of another human being, or objects that can be procured in exchange for it. The fever induced by the vision of a pile of gold does not come from it reflecting the brilliance of the daystar, or the fact that it resists the assaults of the air and the rains, but rather from the vastness of the possibilities that man sees in its sun-colored glow. In these shining pieces of metal, he sees his life being transformed, freedom to use his time as he pleases, luxurious goods, or the lives of others being sustained.

If pieces of metal become signs, it is because they have been appropriated by man to become parts of his world, endowed with a significance, a value allowing it to be compared to countless other things of the world, even though some of them remain priceless. These earthly objects have a worldly dimension, a metaphysical value, that occupies the foreground of man's eyes, who forgets their earthly nature, as pieces of matter extracted from the entrails of the earth. More and more aware of the tremendous power and versatility of signs, man nonetheless soon discovered that the surface of these metallic signs could themselves be used as a medium upon which secondary signs could be imprinted. The molten metal could be stamped with the likeness of a person, an arbitrary carving, or even written characters. This new step was in all likelihood taken at the time when institutions rose in prominence within man's life, when city-states emerged out of deserts or forests, with governments taking upon themselves the charge of issuing currencies, with coins becoming symbols of their power over the people in addition to be signs representing a value. The face of kings and princes could then be seen each time something was bought or sold, involving the ruler symbolically in every transaction, rendering him present during each exchange, and being carried by almost every man in his clothes or his purse. This appropriation of money by the state also led to an intertwining of money with the law of the land, as the use of pieces of metal not imprinted by the seal of the state could be made illegal. This implied that the metal itself began to lose some of its value, as the imprinted sign began to become more important than the substance with which the coin was made. The earthly began to lose ground to the worldly, showing that man's appropriation of his own world now allowed him to take distance from the earth, manipulating the worldly, the metaphysical, more easily than he could master

the earth.

The movement of money, from earth to world, then continues, as governments extended their reach, to the confines of the earth, leaving almost no parcel ungoverned, not ruled by the laws of the world. The substance of the coins at this point mattered less and less, with more common metals replacing gold and silver as the main means of exchange of goods and services. Copper, bronze, or iron could be cast just as efficiently as them, and produced in far greater volumes, used by an ever-growing population. The minting authority could also arbitrarily assign a value to a coin, regardless of the material of which it was made, transforming the unit of a currency into a purely worldly concept. A new kind of coin could be stamped with a “10” and assigned the value of ten coins, a value recognized by all those who put their trust in the minting institution. The unit defining money can then cease to be associated with any earthly substance. The sign stamped on the coin becomes more significant than what it is made of. An inscription is what now gives it its value, an inscription which is nothing more than an earthly signifier inscribed on an earthly object, referring to a value in man’s world, representing the signification of a number or a word, such as a “sestertius” or “lira.” The earthly dimension of money slowly grows smaller, while its worldly one grows larger as man becomes more and more skilled in the handling of signs and in the appropriation of his world.

The dematerialization of money, the fact that it became almost purely worldly rather than earthly, nonetheless probably is almost as ancient as money itself. Men early on indeed learned that they could keep accounts in their head, in the world, as well as on the earth, with notches on wood or tablets of clay for example, dispensing with the need to possess coins present on the earth, as pieces of metals, to trade with others. One could decide that a sheep was worth ten silver coins and keep an account of a debt corresponding to this amount, that may be paid later in silver or with labor or goods, allowing trade to occur, using a currency as a reference, but without the need to possess or use any earthly coins. This continuous movement from earth to world of money then gave rise to paper bills, and then to digitalization, which is still ongoing. One can now be the richest man on earth without possessing any earthly form of money, or even any material, earthly possession. His riches may only be a few digits inscribed inside a computer’s memory, a series of numbers preserved in man’s world and recognized by an authority as an account of the monetary power he has accumulated.

Money is the result of man's relentless labor of appropriation of his world, the development of his mastery of the creation and handling of signs. Having forged this tool, out of metal extracted from the earth and then as pure metaphysical products of his world, he can now wield this tool as a means for a further appropriation, not only of the world, but also of the earth, life, and even the skies. Money indeed represents a power over man's world. Someone possessing a great amount of it is endowed with power, as this money can be exchanged against things of the earth, life, the world, or the skies. He can acquire the rarest objects found upon the face of the earth, made of the rarest materials, crafted by the finest artisans, appropriating the products of the labor of his brethren. It can lead men to offer their services, their efforts, and even their lives in exchange for a part of this wealth that would give them the same power to appropriate. Money can also buy ideas, information, that is, things of the world, finding expressions on the earth or in the skies but whose essence transcends the material realm. Money is also time, the work of the skies, as the wealthy man is freed from the necessity to work for his sustenance, from the backbreaking tilling of the earth or the strenuous labor of caring for livestock. He can devote himself to the exploration of the heavenly, the spiritual, while others provide for him, men who are condemned to look downward, to the earth out of which they came and to which they will soon return. Through the use of money, as tool, the rich thus can appropriate a large part of his world, including the lives of other men, while the poor sees his own existence be appropriated by others.

The impact of money has been astonishing, extending to the end of the earth and penetrating the sky, affecting most branches of life and forever changing its course. With the link between money and the earth severed, the last boundaries limiting the accumulation of wealth are definitively shattered. Trade grows to occupy a significant part of man's life, as he sees his labor and his time turned into numbers, or conversely can buy his own existence on earth with this wealth of the world. An incredible amount of power can be concentrated in the hands of a single human being, potentially without the use of violence or coercion. An insatiable love of money becomes the root of many evils, leading men to forget the permanent bond uniting them to the rest of mankind, the whole tree of life, and all that *is*. Men more than ever become tools and commodities, used by others as means to acquire wealth, and through it, power. Now that the perishable fruits of agriculture, gathering, hunting, or herding

can be turned into numbers that do not rot, are not degraded by the work of the skies, and are not reclaimed by the earth, the hoarding of the product of man's labor is unrestrained, and the greed of the standing creature becomes more than ever insatiable. Focusing on numbers displayed on screens, printed on bills, or stamped on coins, man thus becomes alienated from the reality of the efforts exerted to produce this wealth. His existence may become reduced to what earthly possession could a lifetime of his efforts buy, encouraging those unable to look beyond the horizon of their own being to remain earthly creatures, always looking downward, lusting for the earth and the fruits of the tree of life, instead of looking upward, beyond the heavens, trying to peer at the source and destination of all beings, the truth of being. Like other tools invented by man, money thus empowers him, with a double-edged sword that can lift him up or bring him down, give meaning to life or annihilate it, allowing a further appropriation of his world as well as the appropriation of his existence and his body by others.

The world we inhabit is experienced through the flow of the senses, with each one of them representing a dimension of the earth, life, and the skies. We nonetheless superimpose several other dimensions upon the impression left in our mind by this flux. The most fundamental of these dimensions is our decomposition of the oneness of all that *is* into the multitude of things forming *our* world, allowing us to grasp them with our mind. The invention of money led to the emergence of another of such dimensions, with all things being now valued in terms of numbers, referring to a particular currency. No matter where we presently are, we may consider the monetary value of all the things around us. Let us put a price on these parts of the earth, and the living things roaming over them, paying a special attention to what cannot be valued, bought, or sold. Most things of the earth can be thought of in terms of a weight of gold, a number of coins or purely worldly signs. Among civilized men, the valuation of human life in terms of money remains taboo, but we may think of how the existence of these men present around us is nonetheless continuously being bought or sold, their bodies and their minds being used every day to produce things for others in exchange for money. What would a lifetime of service by these men be worth? The world as a whole may thus be seen through the prism of money, as a dimension that shows how much labor would be necessary to acquire these things, relative to the worth of our own efforts and skills, with

many of these things far exceeding the monetary value of a lifetime of titanic efforts.

Having seen the world in terms of money, we are mindful of the nature of this now ubiquitous invention, by finding an earthly manifestation of this tool invented by our fathers, such as a coin. Patiently touching it with our fingers, we may feel its earthiness, its tangibility. Is the material it is made of itself precious? It is an occasion to reflect upon the contrast between the value of this earthly material, painstakingly extirpated from the soil under our feet, and its face value, according to the inscription etched upon it. Having considered its earthly nature, we may now more attentively observe the signs and figures inscribed over it. Even if its surface was devoid of any marking, it may still represent a signifier, pointing out to a certain value, something that represents a determined number of other things and that can be traded for them. The inscriptions upon it nonetheless represent a secondary signifier, linked with an amount defined in our world, one that we learned to decipher in our youth. We may also realize that if seen only as a signifier, as an earthly object, this coin would be largely worthless. We cannot eat it. It would provide no warmth when our body shivers from the cold during winter. It would not shelter us from the wetness of the rain or the blazing heat of the summer sun. It would not help us extend our bloodline or allow us to enjoy the bliss of a bodily union. This coin nonetheless represents power, and it can be used to obtain the things that we need as well as superfluous luxuries, but this power is only present within man's world, as a tool of the mind, depending on the willingness of others to recognize its worth and trade things against it. Let us contemplate the contrast between the signifier and the signified, the coin as an earthly object and the value and power it possesses in man's world, reflecting on the nature of this incredible tool of appropriation.

Continuing to look at this coin, we may notice which authority issued it, and the nature of what is represented on its two faces. It bears the marks of a government, and it can be used only in a part of the earth ruled by it. Turning our labor, our wealth, into this currency, we acknowledge this authority, and accept to see it control a significant portion of our existence. This coin indeed represents the part of our life that it took us to acquire it, be it minutes, hours, or days of labor, or part of the life of others if this token of wealth was simply offered to us. Each wage that we earn is a piece of our limited time above the earth, as part of life, and each thing

we buy incarnates the sacrifice of our time, our existence, to enjoy a possession or an experience. Let us muse on the place taken by the accumulation of money in our existence, that we may see more clearly the destination of our wealth. What do we value? Is our time worth spending on these things? Money is power, and our lust for money is a lust for power, but if we were to be offered all the money in the world, what would we do with this power over the earth, life, the world, and the skies? Pondering the value of money is an occasion to reevaluate our own values, and those of our kind.

4.3 Appropriating Knowledge with Signs

4.3.1 The Forum - Sharing in the World

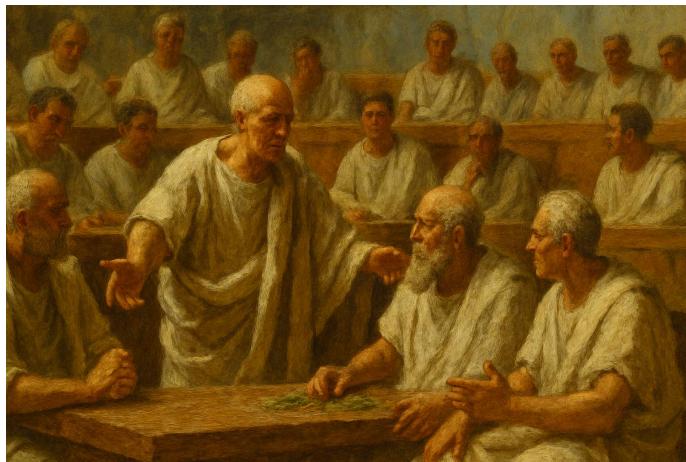
As man continued to run the race for the appropriation of his world, the place occupied by signs in it grew increasingly large. Forging them with his mind, expressing them upon the earth or in the air, these signs became a relatively inconspicuous and yet central element of his life. Unceasingly juggling with them on a daily basis, awake while the sun is shining over the earth as well as when he retreats into the world of dreams when the darkness enfolds his land, he at first focuses his attention upon what the signs represent, the signified, and upon what he can achieve using them, but at some point, a consciousness of the nature of the sign itself slowly emerged. The signifiers began to be noticed, as a window through which he could observe the signified. Paying attention to the frame rather than the picture, the essence of the sign began to be seen more clearly, arousing his curiosity, revealing a new insight: the fact that this tool that he uses each day he spends in this world is both something created by other men, but also something that shapes the mind and the world of each man. Signs are then no longer a mere tool with which man can shape the world, they also become an object of reflection, something that can be worked upon as a material in addition to a tool. His uses of signs can themselves be shaped by his mind, and signs themselves, applying the tool to work on itself, channeling its force in a new direction, focusing its strength with greater efficiency.

Endowed with a growing awareness of the nature of signs, more or less consciously, man can then take new steps in the appropriation of his world, clearing new spaces where things could be edified with signs. One of them is the creation of places devoted to the exchange of ideas, signs traded freely between individuals so that new parts of the world, new ideas expressed as signs, may be uncovered and appropriated by them, as a group. Since the advent of language, men already were used to converse with their brethren, expressing their experiences of the world and the fruits of their reflections, contributing to the edification of a common world, built with signs. They nonetheless did so in a rather unfocused manner, talking with their loved ones around the hearth, or with members of their tribe after a day of labor. As a result of the awareness of the essence and power of signs, men then envisioned something more. They realized

that institutions could be created, using signs, institutions that may foster a more precise, more thorough, and more efficient wielding of this tool we call signs, ideas, or words. They thus began to choose a special location upon the earth, within their world, which would be devoted to the sharing of ideas, in addition to the trading of earthly objects or living animals: the forum.

The forum, seen as a concept, independently of the historical origin of the term, as a part of the city of Rome, is foremost a place where anyone can come, under the gaze of the sun or a roof made by the hands of man, to talk with other men, engaging in debates freely, all being able to take part in the conversation, and all participants sharing the same status, without any authority figure forcefully directing the debates. Historically, the earliest and perhaps the most influential account of such activity certainly is the dialogues of Plato, depicting conversations of citizens of Athens, often taking place in the *agora*, whose goal was to shed light on the nature of signs, examining the meaning of the words they used, the concepts with which they expressed thoughts, that is, to discern the nature of their world, including the nature of the signs that occupy such a prominent place in it. The appearance of such places devoted to the exchange of ideas, the trading of signs, may appear rather trivial in the grand scale of man's (hi)story, but it represents an inconspicuous and yet decisive step toward the appropriation of signs by man, not only as vehicles of thought, but rather objects of investigation, with man becoming conscious of the potential impact that dialogues and debates, the exchange of signs with other men, may have for the further edification and improvement of their world, and their appropriation of it.

The existence of a place devoted to the art of the manipulation of signs then fosters new encounters that would not have taken place without it, and thus new fruits brought to the world as a result of them. Not all men are indeed inclined to join these discussions, to take part in these works of mastering of the signs forming a large part of their world. Known throughout their land, this place attracts those in which the desire for such mastery has already been sown. By instituting such a meeting place, the architects of the city or its rulers thus channel a creative force. They focus an energy that was beforehand dispersed and dissipated, concentrating the power of these inquisitive minds by allowing them to encourage and assist each other, uniting their efforts and talents, resulting in a considerable increase in the quantity and quality of the products of their work of



edification of the world. Taking advantage of the complementarity of their experiences of the world, they share nuggets of knowledge freely with their brethren, without losing the benefit of these products of their experiences for themselves, therefore growing in knowledge together as a whole.

The effect of the invention of the forum is a tightening of the bond uniting the men inclined to participate in the discussion, those willing and able to become conquerors of unexplored parcels of the meta-physical parts of the world. Through discussions, signs incarnating ideas can spread throughout the world, from mind to mind, from individuals to the whole, like a wave propagated through the population, initiated in the world but passing through earth, life, and sky as they are incarnated as signifiers, sounds carried by the air or letters etched upon the earth. A single man can shape the world as it is experienced by every other member of his species, and conversely, he can let his personal worldview be shaped by the ideas of any other. The forum becomes the locus of a struggle of signs, a battle of ideas, with the world being continuously transformed, shaped by the soundwaves passing through the air and entering the ears of men, allowing new things to come to light, and new realms to be appropriated by the pioneers first, and then by mankind as a whole, as they offer their discoveries to others, spreading the word from mouth to ears. The dialogues taking place in the forum echo throughout the earth, life, the skies, and the world, as these signs exchanged in this place cause changes in man's behavior, and through his actions reverberate through the entirety of man's environment.

More than a place or an institution, the forum can nonetheless

be seen as a posture willingly and consciously taken by man, taken toward the world and toward mankind. It represents a desire to wield words and other kinds of signs as tools used to explore the nature of this world he inhabits, and better make it *his*. This is why the forum takes different forms, adapted to its time, and to the people it served. The public forum gave birth to private meetings, where the initiated would debate and discuss specific subjects. From taverns open to all to luxurious rooms inside fortified palaces, reserved to a select few, men formed institutions devoted to the exchange of signs and the edification of the world, joining their brainpower to reach new heights, to pass new milestones on the great race for the appropriation. Left free to decide whether or not to let themselves be influenced, be shaped by the signs thrown at them by others, the collective mind of these communities worked to sort out the true from the false, the beneficial from the detrimental, at least when the participants were sufficiently earnest. Within the forum, signs pass from mind to mind, from the world of an individual to the one of another. They spread horizontally, running to the horizon and covering the face of the earth while reaching the men inhabiting it, with men almost equally affected by this wave carrying meaning to the confines of the globe.

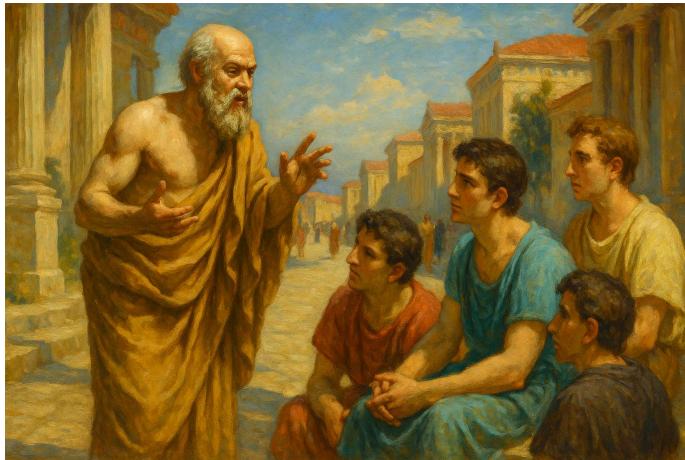
The tidal wave of signs propagating through the human population nonetheless encounters numerous obstacles in its way. One of them is the egos of men, acting like boulders impeding the propagation of this wave, perturbing its extension as they interfere with what it carries. This is why the most perfect forum is one in which its participants are indistinguishable from one another, having stripped themselves of their ego, of their uniqueness, to let themselves merge with the whole of the community. When this is achieved, all can focus on the common work of edification, rather than be dragged down by their selfish ambitions, their so deeply entrenched desire for power or recognition, and their pride. Without identity nor ego, there is no authority, no rigid structure preventing the free flow of signs, ideas, and thus can they elevate the totality that they form, striving toward a single goal, laboring as a single mind and body, focusing on ideas rather than emotions, if they have the will to do so. Caught within a large flow running inside the world, without any filter or barrier, ideas can enter into contact with one another, some being worn down to dust while others are thereby refined and hardened. This process fosters new discoveries, a deeper exploration of the world, and it favors its elevation. The stripping down of

one's identity associated with a forum may nonetheless also become detrimental to this work of edification, if it is not accompanied by a release of the ego. Freed from the consequences tied to their recognition within the community, with their name or their face being associated with every single word they utter, the participant ensnared by his own ego may abandon all empathy, forsake his own humanity, and become a beast led by its crudest instincts.

As an attitude taken toward the world and mankind, a practice rather than a place, the forum has known a significant evolution since its invention. It was first associated with particular locations on the earth, with specific places known as locations where one could encounter other people interested in exchanging words, ideas, and other signs with others. The agora of Athens or the forum of Rome were among these. This kind of forum implied a certain immediacy, with people exchanging without delay, without mediators, able to react in an instant to the flow of sign poured into their ears or eyes. It favored a swift intertwining of ideas originating from different minds, and spontaneous, even emotional interactions, with a relative intimacy.

At a later point, new forms of forum appeared among men, with meeting places beginning to grow more distant from the earth, and becoming increasingly worldly. Letters could then be exchanged to discuss with others, and these letters began to be collected and shared among a community, marking the emergence of journals. They represent a form of forum where scholars can exchange signs with one another, without necessarily encountering each other on the earth, but rather sharing a belonging to a community found in their common world, the journal embodying on the earth the work of this community of mind, a work that is largely immaterial, worldly. This kind of forum invites its participants to take more time to reflect upon what they share with others, with communications carefully prepared, words attentively weighted. Immediacy is replaced by timelessness, with replies that can occur even after the one to which one replies has been reclaimed by the earth, and words written now that will be answered to by a generation having yet to be born.

More and more detached from the earth, the forum now largely takes the form of a virtual space where people from the four corners of the world exchange signs represented by electric impulses reaching the participants almost instantaneously, regardless of their location.



These spaces are metaphysical places, buildings found in the world of signs, built with signs themselves. People interested with almost any subject now have places where they can meet, in the immaterial world, work together to spread ideas, and strive together for the progress of mankind, for pure leisure, or simply for the edification of worldly structures that they deem worthy of being built. Through this activity, man can let his mind, his world, be shaped by the ideas of others, flowing inside him through his senses. He can appropriate new parts of the space in which his world is built, using the experience of others to shed light upon its darkest, unexplored corners. He can nonetheless also use the forums to express the fruits of his own experiences and reflections, offering them to others and thereby also shaping their worlds, appropriating them. The forum is the locus of unceasing struggles, where signs are rubbed against signs to test their strength, their value in the eyes of men, with the most valued of these signs being exalted and spread among the community.

The emergence and development of various kinds of forums fostered the appearance of communities of people devoted to specific areas of knowledge. This allowed these areas of the world to grow significantly, as it allowed people with uncommon interests to find other men with whom they could share their ideas, their experience, and their passion. One no longer needs to wait extensive periods of time or to travel to distant places to encounter a single person willing and able to discuss very peculiar topics, as forums allow all those sharing an interest for these topics to meet each other almost effortlessly. As a result, they can finally unite their talents, stimulate each other, and ultimately considerably broaden the knowledge

shared by these communities, and mankind as a whole. This extremely simple invention therefore had and still has a considerable impact on mankind, and it may be partially thanks to it that man can now enjoy a world so sophisticated and broad, with almost every single parcel of this world built to considerable heights by numerous generations of men, who left the product of their labor to their descendants, as their birthright, which just needs to be appropriated by each one of them through discovery and learning.

From the day we uttered our first words, we have been exchanging signs with those around us, trading sentences coming out of our mouth against others, exposed to our eyes. Looking back at these exchanges having taken place since our childhood, we may realize that most of them were random platitudes or dealt with practical matters of our daily life, not exerting any significant influence upon the world we now inhabit. They were like grains of sand scattered in the wind, lost in the river of time, the work of the skies. We may nonetheless ponder the way our character was shaped by these innumerable, seemingly trivial interactions, how contacts with others defined who we are now, like pebbles rubbing against one another as they are caught in the currents of the ocean, grinding others while being ground by them, with the waters guiding their movements.

Setting aside the largely meaningless chitchat encumbering our world, we may nonetheless now turn ourselves toward what we consider the most meaningful verbal interactions we ever had with other human beings, conversations that irreversibly altered our view of the world around us and steered our life in a new direction. Nuggets of wisdom and experience may have arisen from a confrontation of ideas, a collision of signs handled by different men during these moments, resulting in a deep transformation, within us and within our world. The most precious signs crafted by mankind often were the products of discussions, interactions using signs, between men whose minds were resolutely set on discovering, exploring, and conquering new frontiers of the world, leading to the emergence of ideas never thought of by their predecessors.

Let us now consider the forums found upon the earth, the places where signs are exchanged concerning particular fields or topics. They may be at the vanguard of human progress or humble meetings of neophytes, in a street corner or in vast halls, but they all represent locations where men encounter those among their peers

who share common interests with them, allowing them to debate, to exchange signs, on topics about which most would either not be competent or not be interested. We may contemplate the impact of these places upon the history of our kind, what ideas and what part of our present world do we owe to the invention of such spaces.

We may also now examine the immaterial forums that now occupy a place in our lives, the places devoted to exchanges of signs that are not to be found upon the earth, but rather in the world, as purely meta-physical places. Supported by electrons flowing inside metallic wires across the globe, with both themselves extracted from the earth, these new forums also represent spaces where our world can collide with the one of other men, with each participant ideally talking to the others as equals, stripped down of any hierarchy, and sometimes even of the heavy burden of their egos, to ensure that something new may emerge from these encounters, enlarging the world of mankind. Commenting, arguing, or debating, we may ponder the nature of our interactions on these forums, weighing whether our contribution has brought something beneficial to the world or not. We may also reflect on what we have received from these spaces where signs are rubbed against other signs, and where new ideas are born, where new parts of the world are revealed and appropriated. What place do these spaces devoted to the exchange of signs occupy in our existence?

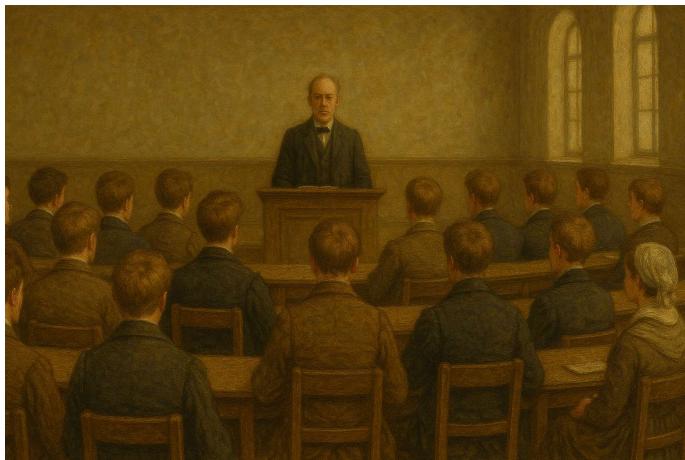
Finally, let us think about the boundaries of the forums. They may be purely worldly, extending to the confines of the earth, but they are confined within specific parts of the world. As loci of exchanges of signs, words in particular, their frontier is traced by the limits of the specific language(s) used by its participants. The language we use is probably undecipherable to most of mankind, and therefore, those not dwelling the world associated with such a language are prevented from participating directly in the exchanges of signs taking place in these spaces. Like a wave extended to the most remote parts of the earth, these discussions influence the world, but this wave cannot penetrate the world of men who cannot understand the language of these discussions, these signs, unless someone or something acts as a bridge between these islands of the world, translating them, allowing them to pass through these barriers and reach new peoples. We may contemplate these frontiers present in every forum, seeing who can participate and who cannot, and the horizon of our language(s), the world we inhabit. Seeing the barrier, we may then truly appreciate what it encloses, the openness of

these places, which offer a space fostering exchanges between large groups of men, allowing new parts of the world to appear, new ideas to emerge and be appropriated, significantly enlarging the range of man's thought.

4.3.2 The School - Guiding Others through the World

The world is filled with contrasts, with imbalances and hierarchies, many of which are rooted in the nature of the earth, life, or the skies. Generations ineluctably succeed to one another, with parents exerting a natural authority over their offspring. The old introduce the young into their world, patiently enveloping them in words of comfort, waves of ancient wisdom uttered with great care, carrying an inheritance going back since long forgotten eras. As if their craniums were empty vessels made of skin and bone, the young absorb this flux of signs poured into their ears and their eyes, unhurriedly letting themselves be transformed by it, growing in knowledge as they take their first steps into this mysterious realm, selflessly guided by its old inhabitants. This guidance through the maze formed by the countless signs present in man's world is what teaching represents. To teach a child is to offer him a chance to appropriate new elements of the world shared by a community of men. This world indeed must first be discovered before one can make it *his*. Being born onto the earth is a prerequisite to entering the world, but it is not sufficient. One must first have a sponsor to enter this realm, someone taking upon himself the task of patiently unraveling the mystery of signs to the newcomer, shedding light upon the bond uniting the earthly or heavenly signifier to the signified, with the whole formed by both representing a thing of the world, revealed through the act of teaching and learning. One by one, as light is shed upon the most fundamental signs found in the world, the novice begins to perceive the world of men as a vast assembly of things and signs, allowing him to grasp various aspects of the earth, life, the world, and the skies.

The first teachers, parents, thus bring their children into the world, years after they have brought them into being and onto the earth. From death to life, from the living womb of their mother unto the earth, this becoming is furthered with a rain of signs poured onto a child whose empty mind collects this wondrous downpour. With abilities engraved in his body, by life itself, following countless years of diligent selection through the action of the play of love



and war, the newcomer on his own learns to shatter the oneness of all that is encompassed by the skies into a constellation of things. Once this art has been mastered by the infant, who now even sees his genitors as distinct “things” standing out of the whole, he is ready to be initiated by them, guided through the threshold of a new realm, one built by the hands of his forefathers rather than by the source of all being. The foundation of this world is made of particular signs, whose signifiers rest upon the air enfolding the earth: speech. Parents both willingly and unwittingly flood the child with words, spreading through the sky, penetrating their ears, words that are naturally learned, deciphered, with the signifier becoming a window showing something that is not necessarily present, bringing attention to any thing, even things that may have yet to exist, fruit of the imagination of man. The effect of this flood is deep and wide. This cascade of signs slowly leaves traces upon the new being, accumulated and rearranged by his nascent mind, like a sculpture to which numerous small lumps of clay are added with each passing day, causing it to grow in stature and strength. Each sign learned is also a new thing shining inside his mind, evoked with a movement of the tongue and a brief puff of air expelled from a chest, until his world is a radiant place, filled with the brightest glow, showing the richness of the earth and the skies but also the one of man’s imagination.

Each day of a man’s life, he learns from his unceasing contact with nature and with other men. Even when he sleeps or when the flow of his senses is almost nonexistent, he can create new signs or assemble them into new things, furthering the edification of his

world. Learning thus occurs continuously and naturally, but this does not mean that men, or even impersonal structures found within the world, may not steer the course of this process. Parents have a natural authority over their progeny, but they may delegate the task of introducing them to certain parts of the world to other men, more familiar with these places or simply more skilled in the art of guiding others through these new areas, that is, the art of teaching. Men are indeed not all equal in their appropriation of the world. Some are only acquainted with its most prominent structures, while others know even the smallest details about some precise location. Seeking the services of such skilled guides, men and children may acquire a familiarity with parts of the world that are totally unknown to their parents.

There are parts of the world that are so intricate and vast that even with patient guidance, it takes years for someone to get acquainted with them, and the most crucial and first to be explored by newcomers to the world certainly is the realm of the written signs. To master the deciphering and crafting of such signs demands a considerable effort, patience, and foremost someone already familiar with this art, willing and able to guide the learners through the maze made of ink and paper, styluses and wax, or chisels and stones. When this art emerged at the dawn of man's history, few mastered it, and even fewer were willing to initiate young people to it. This is why teachers appeared, replacing the parents to introduce children to new parts of the world, areas made with signs that first need to be learned, with signifiers linked with signifieds. Such skill being rare, families dwelling in a particular part of the earth therefore sent their children to these teachers, who had to accommodate these groups, providing them with the tools necessary for the learning of their art. Furniture are needed to bring the stability of the earth to the hands of the learners, desks in front of which they can sit and on which they can rest their arms, ready to use their hands while closely observing them. The students also need a canvas upon which to inscribe words and a pigment allowing a contrast to be created, meaning to emerge, things that may not have been available at home. The school, as a precise location devoted to learning, thus naturally came to be, occupying a part of man's cities from this time on, up until the present day.

The school arose as a worldly structure firmly anchored in the earth, linked with dedicated buildings made with the soil under the student's feet. These buildings represent easily identifiable parts of

cities, filled with people gathered to perform a precise task: the guiding of learners through the world by teachers, while they sit on benches inside rooms made of earth. Like the signs taught within this space, the school has an earthly dimension, the building and the people found inside it, but also a worldly one, as an immaterial structure transcending earth and life to form a worldly structure, an institution exerting a considerable effect on those subjected to its authority, even though this effect cannot be directly experienced with the senses, seen or heard, but rather only considered with the mind, as a concept, a thing of the world.

A school thus represents an institution, instituted using signs, whose goal is to teach the use of certain signs, parts of the world of man. It represents a way of enhancing the appropriation of the world by a new generation, by wielding signs as a tool allowing new beings to become masters of the art of creating, manipulating, and understanding signs. This institution forms a closed loop, not as a snake eating its own tail, but rather as a machine building itself. Once the learners have become acquainted with a new area of the world, such as the space occupied by written signs, they often unknowingly become living pillars supporting this world, preserving signs within their head, with their minds becoming tools used by the world, used to serve it. The young scribe, master of the written signs, can now work for the institutions representing the backbone of the world, and which set up the schools in which he learned this art. Having appropriated this *technique*, he becomes a tool of the world, laboring daily as a cog in the gigantic piece of machinery that it forms, often failing to realize what happened, how he has been led to join the rat race at the center of the life of most men. Having succeeded in appropriating a prestigious part of the world, the learned thinks of himself as above those who haven't, more civilized than his distant ancestors living their lives on the bare earth, surrounded by trees and wild beasts, failing to see that most have thereby become mere tools wielded by something bigger than them, something created by men but that now has largely escaped its creators. The tool has now seized the arm that forged it, and it forces it to spend its efforts for its extension and maintenance.

From an earthly structure, built by men wanting to appropriate the world, the school thus ultimately becomes a worldly institution that demands a price for this gift of appropriation by the student: that they let themselves be appropriated by the world itself. What is now learned by them in public schools is the mastery of the tools

they will need in the future to become “productive” members of a society, servants of the world into which they were thrown at birth. Literacy and calculus, letters and numbers, are the two main pillars upon which this society rests. This institution needs workers able to understand and follow orders expressed with signs, and they need to be able to compute and quantify each thing found in this world. Himself a servant of the institution, the teacher shapes the mind of his students like a lump of clay, following the instructions given to him. Whether it is history, sciences, or humanities, what is taught has been validated by an authority, restricted to a content deemed useful and beneficial, not only to the learners, but foremost to the institution itself, as a means of appropriation of a new generation of men by it. A school remains a formidable tool liberating the students from the shackles of ignorance, curing them of the blindness that plunged countless parts of their world into shadows, even though they pay for this liberation by a new form of servitude.

The nature of the school is then tightly intertwined with the one of the institution having erected it. Men occupying high positions in the hierarchy of this institution determine what is to be learned, how the minds of the students are to be shaped, and on which path they are to be guided while they discover new parts of the world. Those in control of the institution, when it is a government in particular, can then use this tool at their disposal to reinforce their own ranks, to select individuals who are the best fit for any position within its hierarchy, using examinations as a way to validate a familiarity with specific parts of the world, an acquaintance with particular areas of human knowledge. The most diligent learners are deemed the most appropriate recruits of the institution, having let themselves been adequately shaped by it. Examinations thus allow a new kind of selection of individuals, with rewards offered to the most subservient and capable in the form of higher positions in the hierarchy of the institution, also affecting their role in the play of love and war.

Taught to master formidable tools, the students at the schools may nonetheless resist the pressure of the institution and refuse to let themselves be appropriated, as tools of the world and of those who control its institutions. They may make use of the power they acquired to liberate themselves from the chains of the institution, even climbing its hierarchy to steer this piece of worldly machinery in a new direction. Having explored the world at length, they can use the pen as well as the sword to defend themselves, from the aggressiveness and greed of other men or the challenges posed by

their life between earth and sky. Their knowledge of calculus can be used to quantify the weight of the chains binding their mind, or devise weapons aimed at toppling an oppressive institution. The school transformed mankind, both as individuals and as a population, spreading the incredible advances discovered and developed by their contemporaries and ancestors to new generations, lifting them up on the shoulders of those who have been reclaimed by death. With most men endowed with an advanced mastery of the use of signs and familiar with vast quantities of them, they are given a double-edged sword, one that may result in the death of their freedom, with them becoming slaves of the world into which they are thrown, or in the exaltation of their liberty, with this weapon used to vanquish those oppressing them, constraining their minds. What they are thus given is a choice, which is nonetheless never irreversible.

As we were born onto the earth, thrown into a world built by our fathers, we had an impressionable mind, ready to be marked by the innumerable contacts with the things around us, ready to be branded by the blazing seal of the world. The flow of our senses traced deep grooves in our mind, but we also unwittingly let ourselves be fashioned by the generations of living men that set foot upon this earth before we did. Our parents infused us with the knowledge of speech, introducing us to the use of audible signs as tools. They then sent us to schools, institutions that left their mark upon our self as we learned the skills required to serve them efficiently. We may now examine the result of this considerable amount of time spent on school benches, to see what is left of the toil of our teachers. Our command of the written language, our mastery of earthly signifiers, certainly is what left the most profound imprint upon our mind. We have probably forgotten how we were introduced to this art of our world, but every day we continue to explore and use the signs learned there and then. Our familiarity with numbers and calculus also comes from this time spent in schools, and as we contemplate such signs carved upon the earth, we may feel grateful for the patience and dedication of those who offered us this gift, not only our teachers, but also the generations of men who tirelessly and selflessly labored for the creation of these tools of the world, and their continuous transmission, from the dawn of our (hi)story until this very instant.

Considering the piece of land we call our hometown, we may think of the place occupied by the schools in it. They are foremost

buildings made of earth, part of our cities, where people converge to receive the seal of the world upon their mind. In which part of the earth have we been shaped by the world in such a manner? We may try to remember the days spent in this place of learning, this temple devoted to the discovery of the world of men. We may also muse on the impact that this learning had upon our lives. What would our days be like without our appropriation of these tools of the world, handed to us in school? The appropriation of the world that came with the guidance received there nevertheless represented more than a discovery, shedding light on new parts of it. If we diligently played by the rules of the game of learning into which we were thrown by the institution governing these temples of knowledge, we may have been offered the opportunity to climb its hierarchy, occupying positions reserved to those who demonstrated not only a capacity to become familiar with certain parts of the world, but also to conform to the expectations of the institution, and accept to become its tool, a cog in a gigantic piece of machinery, subservient to its purpose. We may now examine how we played this game, and what we got out of it. Our learning being tested through examinations, have we shown ourselves to be willing servants of the institutions, or have we resisted, not letting ourselves be molded by the seal of the world? Contemplating our place in this world, let us see how decisive our behavior in school was in the fact that we now find ourselves in our present condition, even though the game is still ongoing, with nothing irremediably set in stone.

Having spent the major part of our youth inside buildings made by the hands of men, exploring the immaterial realm composed of the creations of the minds of our predecessors, we nonetheless have been deprived by the institution ruling over our land of an acquaintance with nature, the raw experience of the earth, life, and the skies. Forced to grow up to serve the world, we had few occasions to touch the bare earth, to feel the life burning around us, and to behold the magnificence of the spectacle offered to us by the celestial dome. Alienated from nature by the institution, condemned to explore the world so that we may serve it efficiently, we may recognize the price paid in exchange for the power we acquired from our years of education. We should nonetheless also acknowledge that we have been offered a precious gift by this structure, as it considerably enlarged the horizon of our mind, including our vision of the earth, life, and the skies. The schools we attended offered us a glimpse of the past, the epic history of man, but also a vision of the glorious story of na-

ture. The formation of the earth, which cannot be experienced with the senses, has been taught to us, shown as a worldly vision, expressed with signs, thereby making us more familiar with its nature. The same is true with life, as we learned the astonishing complexity of the middle realm, invisible to the naked eye, and finally, our teachers also revealed to us the majesty of the heavenly wheels, shedding light upon the celestial bodies and their revolutions, allowing us to contemplate the skies with a greater comprehension of their nature. Schools allowed us to transcend our immediate sensory experience, and to overcome the limitations of the education of our own parents. Remaining conscious of the way it may subjugate us and use us as tools for the benefit of others, let us nonetheless express our profound gratitude for what this structure, invented by our ancestors, has offered us.

4.3.3 The Library - Consolidating the World

Life early on learned to appropriate death for its survival, its propagation through space and time, long before the first man stepped foot upon the earth. Our own body bears the traces of such events of appropriation, with our hairs and our nails representing dead matter attached to our bodies, as tools aimed at protecting our living flesh from the assaults of the earth, other living things, and the skies. The invention of writing, the result of a reflection rather than a mere product of the play of love and war, reproduction and selection, marks the advent of a new form of appropriation by the living, one by which men use the earth as a storehouse of their world. They can now etch their thoughts, their words, into stone, wax, wood, or metal. Any material can be used to relieve them of the burden of remembering every thing of the world, every idea that they want to preserve, for themselves or their descendants, or see them vanish forever. In the same manner as hairs and nails represent an appropriation of the dead earth by life as a means of protection of the flesh, a written inscription is an appropriation of the earth by man as a means of preservation of his world, an extension of his body outside of life. Before this invention, the world of man could be seen as the sum of all the concepts and ideas held in the memory of all the present dwellers of the earth. If a thing of the world, such as a sentence or an idea, was not remembered, upheld with their brain as hands uphold a thing of the earth, it would fall into oblivion, never to be recovered. The size of this world was so severely constrained

by the limits of the brain and those of the learning process necessary for men to appropriate such things of the world and be able to preserve them. Acting as pillars of flesh upholding the world built by their ancestors, men thus toiled to pass on the legacy of their fathers, but due to the fact that their hands were too full because of this accumulation of things created by men long returned to dust, a considerable number of these things were irremediably lost. Finally able to relieve his brain of this burden, placing it upon the earth itself, as characters written down on paper or stone, man therefore began to transcend these barriers to the expansion and preservation of his world.

Taking advantage of the resistance and stability of the earth, man becomes able to amass and preserve more and more things of the world, and as a result the world itself becomes filled with the signs crafted by past generations, vestiges of distant eras. Appropriating the earth, life therefore also appropriates the work of the skies, the passing of time and the extension of matter through space. Those experiencing presence, their flesh vivacious and their mind alert, can now reach unto the past, reading the words of the men who were present in a different world and thereby becoming closer to them, but they can also reach unto the future, leaving their own words to be read by men having yet to be born. The mastery of literacy is nonetheless insufficient by itself for this appropriation of the work of the skies. The signs of the past indeed must not only be present upon the earth, existing somewhere upon its surface, in order to become tools of appropriation. They must also be accessible to the one wishing to wield their power. Having passed from mind to earth, these signs have become earthly objects, subjects of trade and possession, and they must therefore be acquired, collected, and protected to be used. First handwritten, on parchment of leather, papyrus, or tablets of clays, each sign was precious, and the accumulation of such tools of the world were reserved for those either wealthy or having ample amounts of free time. Men nonetheless realized the need to share such a wealth of the mind, these treasures of the world, and thus they began to create institutions devoted to the accumulation of signs engraved upon the earth: libraries.

A library is foremost a means of appropriation of the world, a tool allowing the men having access to its content to discover new parts of the world built by other men, to visit treasures of signs patiently accumulated since signs where first transferred from the world to the earth, when writing was invented. The patron of the



library nonetheless not merely visits the world, but also makes it his home. The mountains of signs found within its walls become his possession, as he absorbs them, letting visions of these marks etched on the earth flow through his eyes and seep into his mind, his world. With the library, man thus makes use of the earth as a cane to support a larger, heavier world resting upon his shoulders, as he gains sight of the work of the heavens, beholding depths of the past and leaving his mark upon the world of those who have yet to be born.

A library thus represents a place of learning, in addition to being a repository of signs to be preserved for generations to come. It nonetheless significantly differs from another place devoted to learning, the discovery and appropriation of certain parts of the world, built by men: the school. Contrary to the latter, where the students are guided through a very narrow path, holding the hand of the teacher firmly, only beholding and appropriating what is deemed useful by an institution, the library offers its patron the freedom of choosing where to go within the world of signs, what areas of the world he wants to discover and make *his*. Unless the library has been curated to prevent the discovery of certain areas, he may freely wander through the world, using these tools made of ink and paper to liberate himself from the walls in which his self is held prisoner, countering the influence of the authorities to which he is submitted, being offered a chance to see the water in which he spent his life like a fish, by exposing himself to new ideas and by looking at what he considers like his home in the world from afar for the first time. The pace of this journey through the world, or its duration, is also set

by the patron, letting him stroll around leisurely or frantically run through the maze built by his ancestors.

A Temple of signs, like the school, the library also differs from it by the silence reigning within its walls. This silence is not a mere absence of speech or noise. It is an indication of a fundamental aspect of its nature. The school is a place where the voice of the teacher echoes with those of the students, who react to what he teaches them, asking questions and being interrogated in return. A school is a place where signs are learned, but also exchanged and produced. In contrast, the silence of the library shows that it is a place of pure learning, of silent discovery of the world, without guide, without dialogues, only a quiet march through the meanders of signs built by mankind with ink and paper, belonging to the earth. Within the library, there is no authority telling people what they should learn, which part of the world they should appropriate. A patron can use this tool to cultivate his knowledge of himself or come for mere entertainment, making time fly by plunging himself in a continuous flow of signs allowing him to avoid facing the terrible question of the meaning of his own existence. These signs on paper may represent keys opening the doors of his consciousness of the nature of being, and radically change the course of his life, or they may simply numb him enough so that he would cease to ask himself questions. As every other tool made by the hands and the mind of man, the library leaves its patron in charge, free to choose the use he will make of it.

A place of silence and autonomous journey through the world of signs, the library is nonetheless not a place devoid of any help for those requiring assistance. The librarian is a helping hand and someone holding a map of the world in his hands, and the patron may use his knowledge to find his way through the mountains of signs present within the walls of this institution. The mountains of signs are indeed not random piles, but rather the product of a reflection, a precise ordering that allows librarians and patrons to find their way through this large image of the world of signs, with books organized by topics, language, or authors. Thanks to this ordering of the library, precise collections of signs, specific parts of man's world, may be found swiftly and with little effort. Looking for a piece of information, a thing of the world, the patron may consult the map or ask the librarians and promptly find an answer, as if the signs he sought were already present in his mind, showing how the library may become an extension of his own flesh and mind.



Contrary to the brain, the library can also be continuously transformed, extended, or duplicated. There are no longer any limits to the number of signs that can be hoarded by mankind, as walls can be pushed, halls can be built, and the mountains of characters concealed under its roof may be higher than clouds. The wisdom of the past, the knowledge of the tools made by men of yore, no longer crumbles to dust as the fire of life is extinguished from the bodies of old generations. It is accumulated and continues to be accessible to their descendants, allowing them to benefit from the work of a long chain of generations, innumerable individuals who labored for the appropriation of the earth, life, the world, and the skies. The world finds itself consolidated, strengthened, more stable as a result of the presence of this institution whose goal is the safeguarding of signs. The population of a land may be wiped out by disease or war, but the library may nonetheless stand, and parts of the world of its inhabitants may be recovered by others, even centuries later.

The library began as an earthly building, an institution present in cities or communities, but it has now evolved and takes on new forms. The stacks of paper covered with ink have largely been replaced by minuscule switches activated by electrical currents, and the patrons no longer need to set foot in the building housing them. The stream of signs flows like a torrent, from a storehouse into the homes of everyone on earth, passing through the seas and the skies before reaching the eyes and the ears of its users, touching their hearts and penetrating their minds. The form may have changed, but the nature of the library remains the same, as it continues to represent a way by which man consolidates his world, and it allows

men to freely discover new parts of the world, searching for answers to their questions by typing signs, requesting the help of an electronic librarian to find guidance through a sea of signs. More than ever, the world now rests upon the earth, as much as upon life itself, and thanks to this power, man has access to more knowledge than any generation that came before, offering him a better chance to further his appropriation of the earth, life, the world, and the skies.

Filled with a flurry of memories is the living mass sheltered by our skull, a dome made of minerals extracted from the earth, accessible to our reason with a mere intent to bring them to the foreground of our attention. The mystery of the ordering and nature of these memories remains, but as great as this wondrous collection may be, this gathering of the traces of our past and of our imagination is nonetheless dwarfed by the extent of the world built by men, using signs as its bricks and mortar. Even when the living temples of signs formed by our skulls fall into ruins, ineluctably devoured by the earth, this world nonetheless stands, not only because it is supported by a new generation but also because this realm now largely rests upon the earth itself, as collections of books and files stored in vast libraries, built to outlive their makers. We may penetrate one of these buildings devoted to the preservation and the discovery of the world, passing our hands on the stacks of books discolored by the rage of the daystar, seeing in them earthly incarnations of the thoughts of living men, who may now already have returned to the earth, and chose to pour out these signs out of their mind to etch them upon paper, leaving traces of their brief passage among the living to their successors. We may imagine the lives of the authors of these books, and may we appreciate their efforts, which now allow us to discover and appropriate new areas of the world, to know things that we would never have without their invaluable contribution.

The library around us is nonetheless more than a mere repository of the legacy of our forefathers. It is also and perhaps foremost an instrument at our disposal, meant to open up new sections of the world to us and allowing us to appropriate them. These things of the earth that we can seize with our hands represent extensions of our body, of our brain, as we can decipher their content and let it seep into our memory, ceasing to be mere bits of earth and becoming part of our inner world. Let us consult one of these vast collections of sooty signs printed on pearly-white sheets, noticing how the contrast

between ink and paper is transformed into sentences and images by our mind, enriching our worldview by adding new signs to those we already keep in memory. Beholding the vastness of the library, we may also be struck with awe in front of the monumental scale of these mountains of signs, as an entire lifetime of reading, a lifetime of exploration of this small sample of the world built by mankind, would not be sufficient to exhaust it. We are condemned to only discover and conquer an insignificant part of the world of our branch of life but let us be thankful for the priceless treasures we have already unearthed in such libraries, jewels that may have steered our lives in a direction they would not have taken without it, making us who we are today.

The true extent of the world of man may then be fathomed, when one imagines not only the vastness of the earth, the considerable numbers of individual living beings forming life, and the boundless immensity of the skies, but also the prodigious dimension of the sum of all the signs produced by the mind of man and now supported by the earth, as printed books or electrons in memory banks. How narrow is our horizon, our worldview, compared to what has been achieved by our crooked but magnificent branch of the tree of life. Encompassing our visions and knowledge of the earth, life, the skies, and the world itself, the libraries of our time represent a gigantic image of all that has been discovered or imagined by the human mind, engraved in the earth, waiting to be beheld by our eyes and unearthed. The stacks of books may have been replaced by electrons, and the libraries may now be contained in our pockets, but their nature remains unchanged. Contemplating the inestimable treasures they contain, let us muse on the power they give us but also on their limitations, the horizon of mankind. What are the questions whose answers are not found in any of these colossal storehouses of signs? They may considerably facilitate our daily life, but what role do they play in our progress in the race for the appropriation of the earth, life, the world, and the skies? This instrument in our hands may be used as we please, and we may thus now reflect on what use we have made of it in the past, in the present, and how we should use it in the future, honoring the efforts of those who offered it to us.

Chapter 5

Appropriating Being

Having scrupulously observed some of the most prominent blocks forming the walls of things enclosing us, the nature of the citadel in which we were raised should now appear more limpid. What was once concealed by everydayness, eclipsed by familiarity, should now begin to be visible. These walls should now show a different display in front of our eyes, following this disclosure, with the bond between each one of these things and the different realms of nature now being unmistakeably apparent. These things can now also be beheld under a new light, according to a new dimension, as products of the great race for the appropriation of nature, seen as windows offering a vision of a part of the (hi)story of mankind. The race has been a defining feature of our branch of life, shaping the lives of countless generations, as the citadel in which we spend our days was patiently built, brick by brick, one thing after another. Extensions of our body, supplements to what life has offered us, these things make our existence easier, giving us a helping hand as we participate in the play of love and war, struggling to stay above the surface of the earth, part of life, and striving to extend our bloodline. Their usefulness is undeniable in this regard. They represent ways by which our branch of life appropriates the earth, life, the world, and the skies so that we may better play our part in the growth of the great and ancient tree to which we belong, but as exhibited by the existence of the present work, man is not only guided by the whispers of life ringing in his ears, calling him to be a dutiful servant of the middle realm caught between earth and sky. Some of them also hear another sound echoing in their mind, a whisper of being, inviting them to appropriate the whole of all that *is* without considering



the usefulness of such an appropriation, and this from the dawn of mankind.

At the center of cities or in their outskirts, conspicuously located in front of a forum or hidden in secluded groves, sanctuaries and temples have been built by man's hands, laden with a heavy significance in his life, setting aside a part of his world for a purpose separate from the race for the appropriation of nature driving its edification. The temple is largely useless to the world. The sanctuary plays little part in the race. And yet, men spend their strengths to open up such sacred spaces, refuges from the hustle and bustle of the world, experiencing within their walls something that transcends their instincts pushing them to remain humble servants of the world, tirelessly discovering and building things for its edification, slaves laboring for the perpetuation and propagation of life. As told by the French aviator, keen observer of the earth, the skies, and the world between them:

And this is why I tell you: If you build up the useless temple because it is useless for cooking, for rest, for the congregation of notables, or for storing water, and only useful for the enlargement of the heart of man, and for the quietude of the senses, and for the time that matures, as it resembles a cellar of the heart where we stay for a few hours to bathe ourselves in equitable peacefulness and the appeasement of passions and justice, with no destitute people. If you thus build up a temple where the pain caused by ulcers becomes hymns and offerings,

where the threat of death becomes a harbor discerned between the waters that finally became still, would you believe to have wasted your efforts? ¹

The ramparts of the citadel, the walls of things forming our world, separate us from nature, protecting us from its wrath but also occulting its truth, whereas the temple performs an opposite function. It muffles the noise of the world and veils its light, opening up a space that is not erected for the service of the play of love and war nor the race for the appropriation of nature. On the contrary, it is a place where one may reach ecstasy from the world, stepping out of it, being freed from the smothering flow of information poured into man's mind by it. The sanctuary is a place at the heart of the world, but also a doorway leading out of it, a threshold that may guide men to liberate themselves from the servitude of the world and life.

In dark caves dimly lit with the wobbling light of a torch or in a majestic structure supported by gigantic pillars of marble flooded with the blinding radiance of the sun, men have always sought to find refuges to escape the grip of the world, as soon as the walls of things began to enclose them. During most of the (hi)story of their species, men nonetheless have struggled to leave the world behind at the threshold of the temple. Rather than strip themselves of the burden of concepts and ideas created and placed upon them by their brethren and ancestors, so that they may experience the truth lying beyond the walls of things, they unceasingly brought these shackles and blindfolds veiling the essence of being within the sanctuary. They brought the products of their reflection and imagination, such as "gods," "revelations," and "scriptures" within the space opened up by man so that he would occult the world to perceive the truth lying beyond its walls, and thereby perverted the nature of the sanctuary, tainting the vision of its visitors. Following priests and holy

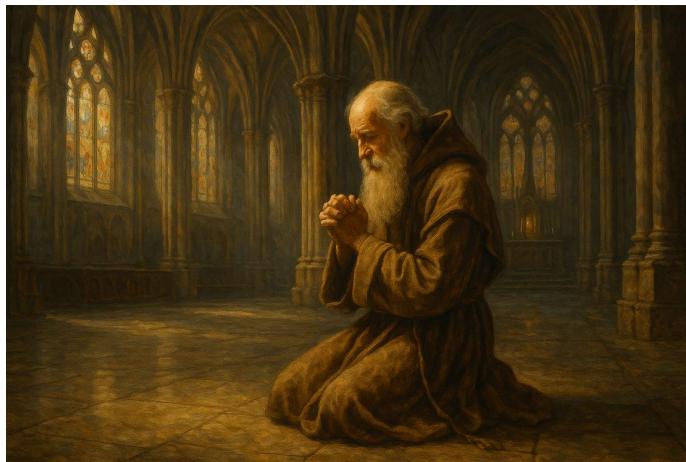
¹

TBA. French original: "Et c'est pourquoi je vous le dis : Si vous bâtissez le temple inutile puisqu'il ne sert ni à la cuisson, ni au repos, ni à l'assemblée des notables, ni aux réserves d'eau, mais simplement à l'agrandissement du cœur de l'homme, et au calme des sens, et au temps qui mûrit, car il est tout semblable à un cellier du cœur où l'on s'installe pour baigner quelques heures dans la paix équitable et l'apaisement des passions et la justice sans déshérités, si donc vous bâtissez un temple où la douleur due aux ulcères devient cantique et offrande, où la menace de mort devient port entrevu dans les eaux enfin calmes, croiriez-vous avoir gâché vos efforts ?"; From: Saint-Exupéry, *Oeuvres Complètes II*, n.p

men, the visitors were led to believe that the temple would be a window toward the heavens, another world where an absolute order is imposed from above, often with an afterlife meant to represent man's destiny and for which he should sacrifice his terrestrial existence. Turning their eyes away from the world, they spend their days and their nights contemplating mirages, creating new castles in the sky as they flee the one imprisoning them.

When the temple is profaned by things of the world, metaphysical ideas that are the products of conjectures rather than the fruits of a genuine observation of nature, it thus becomes the seat of religion, a mere refuge away from the race for the appropriation, rather than a means of liberation from man's servitude to the world and life and a doorway toward a genuine appropriation of being. This contamination of the temple by the woes of the world may be seen as the result of man's anxiety when he is confronted with the void, the unknown, a desert where he does not possess any reference point that would allow him to fathom his predicament. Without the noise and the light of the world, man is forced to face darkness and silence, uncertainty and ignorance, to be confronted with the very root of being, the essence of the heavens, understood as a void carried through time. Hermits, mystics, or attentive listeners of the whisper of being have always been able to visit the sanctuary and fearlessly face the abyss found within it, unburdened by the need to carry any thing of the world in its midst and embracing their own ignorance, their own helplessness as they are carried on the path taken by the heavens, letting themselves be approached by the unknown and delving headlong in it, with a broad smile and wide-open eyes, but the presence of such men always remained rare, standing out of the throng passing its threshold.

Religion may be seen as a first step, a prelude to a true liberation from the grip of the world. Even when seducing man with wondrous visions of a divine will and order, retribution for one's deeds, and an afterlife reflecting our obedience to this order preached within the temple, it already represents a form of liberation from the yoke of the world and life. It leads the pious away from the pursuit of things, the greed that is the driving force of the appropriation of the earth, the lust and the gluttony that power the appropriation of life, and the pride and envy inviting the appropriation of the world. Listening to the voice of God, the devout takes refuge in the temple, where he does not feel assailed by the world, calling him to sacrifice his precious time on earth to further its endless extension and elevation.



As told by the Hebrew psalmist, one of these pious men:

One thing have I asked of the LORD, that will I seek after: that I may dwell in the house of the LORD all the days of my life, to gaze upon the beauty of the LORD and to inquire in his temple. ²

—Psalm 27:4

To the servant of God, the temple is a place of inquiry and contemplation of the heavenly. There, he also ponders the products of what he deems to be divine revelations, such as holy scriptures, parts of the world rather than nature, but these moments nonetheless offer him countless opportunities to consider the nature of the world into which he was thrown at birth, and to the service of which he devoted a large part of his life. Even when he carries things of the world during his retreats in the sanctuary meant to be a place of ecstasy (as *ek-stasis*) from the world, the vacuity of the race shines in his eyes. The chains binding his hands and feet are noticed more and more clearly, and he realizes that by dwelling in this world, he is indeed protected from the dangers of the earth, life, and the skies, but he is a slave to this antique and gigantic piece of machinery involving the entirety of mankind since the first men rose from the ground and fashioned tools made of the earth. Ecstasy from the race

²

TBA.

is perfectly within his reach, but still holding on the things of the world he deems to be sacred, he cannot use the temple as a doorway to depart from the world itself and experience the truth lying beyond the walls of things.

The progress of the men frantically running the race for the appropriation of nature, relentlessly investigating and exploiting the earth, life, the world, and the skies, nonetheless undermined the efforts of the priests of the old gods, who preached their vision of a divine order based on tradition rather than an experience. The scientists and entrepreneurs sowed doubt in the hearts of the dwellers of the world, also tempting the pious with trinkets, vain possessions produced as a result of their running of the race, inviting them to desert the holy place, the refuge, to plunge themselves back into the noise, to delve into the light of the world, and to once again diligently serve it, participating in its “progress.” Seeing the inventions of the priests exposed by the runners of the race, the investigators and robbers of nature, they began to disregard the precious truth revealed within the walls of the temple. They forgot the experience of the ecstasy from the world that it provides, one that can be felt with one’s senses, and is not a mere fruit of the fertile imagination of the priests and the servants of the gods. Focusing their attention on the worldly contamination of the sacred space meant to be a refuge away from the world, they forgot its origin and its essence. The gods were left to die in the deserted temples, and the truths discovered by countless generations of its visitors are now forgotten, only representing faint traces on sheets of paper or parchments. A death is nonetheless an occasion to provide a fertile ground for the birth of something new, something that would be stronger than what came before it.

When the throngs of visitors soiling the sanctuary with the things of the world that they fail to let go have left, silence and darkness once again reign within its walls. When even the gods have fled, the temple then once again becomes a place of ecstasy, where those coming empty-handed, stripped bare of their worldly possessions, can finally contemplate the world, behold the walls of things by standing away from them, as objects that have been released, seeing that they now veil the horizon. The ecstasy from the world offered by the sanctuary allows the realization that this world is mere representation rather than truth. With the walls of things seen from afar, the blindness to their nature caused by their omnipresence, their everydayness, finally begins to be cured, and the

truth both hidden and revealed by these things may now appear. It is revealed because all that we can grasp with our mind are things belonging to our world, made into concepts and ideas, imparted with names, but also hidden because these representations lead us to mistake the sign and what it represents, the idea and the things itself. In a state of ecstasy from the world, nothing can be fathomed, but this is precisely what allows the perception of the truth concealed by the walls of things, the truth of being, with the whole of all that *is* felt as a sensory experience rather than understood as an intellectual construct. Facing the quietude and sobriety of the temple, without profaning it with his attachment to the things of the world, man may transform the state of ecstasy into a new home for him, feeling the bliss of being free, of simply being, without owning anything, without pursuing anything, being simply carried away on the way of the heavens, on the face of this small planet, embraced by the arms of a galaxy, itself brought through time and space toward an unknown destination.

The experience of liberation from the race for the appropriation of nature, and then from the world itself, offered by the sanctuary kindles a yearning for a communion, a melting of the ego and a craving for contact with what lies beyond the man-made walls of things forming our world. Having released the things belonging to the earth, life, the world, and the skies, man then feels the need to walk backward the path taken by the runners of the race, fleeing the tools and the weapons of the world, to once again experience life as it was at the instant the first men rose up on their feet and used their idle hands to appropriate nature. Running outside of the citadel of things, the ecstatic man craves contact with the earth, life, and the skies, this nature veiled by the walls of things during most of his life. Before his ecstatic experience, he enjoyed leaving the cities to spend days in the countryside unspoiled by the hand of man, but he did so without being free from the shackles of the world, still seeing nature through the prism of his world, as a collection of things, a reserve of resources to be exploited, things to be possessed. Only in ecstasy from the world may the truth of nature shine in all its splendor and be felt in one's flesh and bones, as an experience of the unicity of all that *is*, the truth of being.

Embracing the useless, delving into a raw experience of what lies beyond the walls of the citadel of things, man may then find the strength and the desire to return to this world he left, seeing its worth. As told by the French aviator:

And man, indeed, needs walls to bury himself in and become like a seed. But he also needs the great Milky Way and the expanse of the sea, even though neither the constellations nor the ocean is at this moment of any use to him. As what does serving mean? And I know some who have climbed the mountain for a long time and with great efforts, scratching their knees and palms, wearing themselves out during their ascension, in order to reach the peak before dawn and abundantly drink of the depths of the blue plain, as one searches for the water of a lake to quench one's thirst. And they sit down and there, they behold and they breathe. And their hearts beat joyously, and they find a perfect remedy to what disgusts them. And I know some who search for the sea at the slow pace of their caravan and who need the sea. And who, when they reach the promontory and look over this expanse filled with silence and thickness and that forbids to their glance its provisions of algae and corals, breathe in the bitterness of the salt and wonder at a spectacle that is of no use to them at this moment, as one cannot grasp the sea. But they are cleansed in the heart of the slavery of the little things. Perhaps they perceived with disgust, as if they were behind the walls of a prison, the kettle, household utensils, the complaints of their women, the daily gangue, which can be read through and feels things, but may at times become a tomb and thickens and lock in. Then they take provisions of the expanse and bring back home the beatitude they found there. And the house is transformed because somewhere there exists the plain at the break of dawn and the sea. As everything opens up toward something larger than itself. Everything becomes a path, a way and a window toward something other than oneself.³

3

TBA. French original: "Et l'homme, certes, a besoin de murs pour s'y enterrer et devenir comme la semence. Mais il a besoin aussi de la grande Voie Lactée et de l'étendue de la mer, malgré que ni les constellations ni l'océan ne lui servent de rien dans l'instant. Car qu'est-ce que servir ? Et j'en connais qui ont longuement et durement gravi la montagne, s'écorchant aux genoux et aux paumes, s'usant dans leur ascension, pour gagner avant l'aube la cime et s'abreuver de la profondeur de la plaine bleue encore, comme l'on cherche l'eau d'un lac pour y boire. Et ils s'asseyent et ils regardent une fois là, et ils respirent. Et le cœur



An ecstasy from the world allows man to experience the truth of being, felt with his senses and not as a promise, in the hereafter. It is only the discovery of the predicament wherein he already was since the day he was born, but to which he was blind, in the same manner as a fish having never left the sea remains ignorant of the nature of water. This ecstasy thus also allows him to perceive the incomparable beauty of the world, finally seen from afar, with the buildings made by the hands of his brethren forming a perplexing skyline on the horizon, a testimony of man's remarkable abilities, and a monument honoring the relentless work of the generations of men having run the great race for the appropriation of nature and lifted up this world. This vision shows man that ecstasy can always only be temporary, transient, otherwise forgetfulness ineluctably seizes his

leur bat joyeusement, et ils y trouvent un remède souverain à leurs dégoûts. Et j'en connais qui cherchent la mer au pas lent de leur caravane et qui ont besoin de la mer. Et qui, lorsqu'ils arrivent sur le promontoire et dominent cette étendue pleine de silence et d'épaisseur et qui interdit à leurs regards ses provisions d'algues ou de coraux, respirent lâcheté du sel et s'émerveillent d'un spectacle qui ne leur sert de rien dans l'instant, car on ne saisit point la mer. Mais ils sont lavés dans leur cœur de l'esclavage des petites choses. Peut-être assistaient-ils avec éccureusement, comme de derrière les barreaux d'une prison, à la bouilloire, aux ustensiles de ménage, aux plaintes de leurs femmes, à la gangue journalière, laquelle peut être visage lu à travers et sens des choses, mais parfois devenir tombeau et s'épaissir et enfermer. Alors ils prennent des provisions d'étendue et rapportent chez eux la bénédiction qu'ils y ont trouvée. Et la maison est changée de ce qu'il existe quelque part la plaine au lever du jour et la mer. Car tout s'ouvre sur plus vaste que soi. Tout devient chemin, route et fenêtre sur autre chose que soi-même." From: Saint-Exupéry, *Oeuvres Complètes II*, n.p

heart, and he once again becomes engulfed in everydayness, blind to a predicament to which he has grown too familiar. This is why liberation from the yoke of the race and the world does not imply their rejection. Man is who he is because he has been shaped by this race and this world, and even though they have veiled his horizon until now, they also have offered him much wisdom.

Living one with the earth and the skies at all times, the beasts roaming through the open country are nonetheless utterly blind to the truth of being. Only through his consciousness, sharpened with the tools of the world, language in particular, can man appropriate his own being. One needs to have experienced the life of a slave to truly enjoy freedom. One needs to have spent time in darkness to genuinely appreciate the magnificence of light. Like the time spent in the motherly womb, our time spent prisoner within the walls of things may thus be seen as a stage of our life, an infancy, preparing us for an adulthood, an age when the race for the appropriation of the earth, life, the world, and the skies gives way to an appropriation of being, when the runner stops his course to sit down and feel rather than make and think. Having left his mother, the young nonetheless learns to cherish his origin and to be grateful for what made him who he is. This is why ecstasy from the world does not imply disgust of the world. On the contrary, it represents an occasion to transform one's relationship with it, an invitation for a homecoming. As told by the French aviator:

And I want to open your eyes to the mirage of the island. As you believe that in the freedom of the trees and the meadows and the herds, in the exaltation of the solitude of the vast expanses, in the fervor of unrestricted love, you will sprout as straight as a tree. But the trees I have seen growing the straightest are not those growing free, as these trees unhurriedly grow, wandering in their ascent and elevating themselves along a crooked path, whereas the one of the forest undisturbed by the hand of man, harassed by enemies stealing its part of sunlight, climbs up straight to the sky, as if responding to an urgent calling.⁴

4

TBA. French original: “Je te veux dessiller les yeux sur le mirage de l’île. Car tu crois que dans la liberté des arbres et des prairies et des troupeaux, dans l’exaltation de la solitude des grands espaces, dans la ferveur de l’amour sans



—Saint-Exupéry, *Citadelle*

Man needs the world as a space contrasting with nature in order to gain consciousness of the truth of nature, just as he needs the temple to isolate himself from both the world and nature and thus reach ecstasy from both, and then appreciate the truth of being. Letting himself once again be enclosed by the walls of things, having gained awareness of their nature, he can rediscover the world in a new light, seeing his life transformed by what he has found beyond the walls. He may decide to once again run the race for a moment, and then sit down upon the earth, his legs parallel to its surface, his torso pointing out to the heavens, his glance set upon the skyline, the horizon where earth, life, world, and sky meet. Mindful of all things, grasping and possessing nothing, he may then endeavor to take another step on the path of appropriation of being. Freed from the yoke of the race and the world, he nonetheless remains a dutiful servant of life, an actor of the play of love and war, like every single being forming the colossal tree unhurriedly growing between earth and sky.

The play of love and war is the force driving the growth of the tree of life, since its first seed was planted in the sea, eons ago. Love

frein, tu vas jaillir droit comme un arbre. Mais les arbres que j'ai vus jaillir le plus droit ne sont point ceux qui poussent libres. Car ceux-là ne se pressent point de grandir, flâuent dans leur ascension et montent tout tordus. Tandis que celui-là de la forêt vierge, pressé d'ennemis qui lui volent sa part de soleil, escalade le ciel d'un jet vertical, avec l'urgence d'un appel." From: Saint-Exupéry, *Oeuvres Complètes II*, n.p

is the instinct calling us to find a member of the opposite sex to mingle our body and heart with, the result of which is the birth of a new life, combining the essence of the two lovers. It is also the love of life, the survival instinct that makes us want to remain above the earth rather than under it. War follows the birth of the children of love, as the earth, life, and the skies mercilessly assault them to weed out the unfit and allow the fittest to thrive, before they fight among themselves to win the love of partners most likely to give birth to the fittest members of the next generation. War also occurs between living things, even between men themselves, as their survival depends on the securing of resources from the earth, life, and the skies. They need food, shelter, and tools in order to remain part of life, surpassing their competitors for resources and mates. Man, like any other living thing, is therefore driven by deeply entrenched instincts commanding him to assume his role in this play of life. Even endowed with consciousness and dwelling in a sophisticated world, he remains as much a slave to life as any other creature. If he frantically runs the great race for the appropriation, consuming most of his existence in this task, it is because participation in this race is part of his role in the play of love and war, driving force of life. Man appropriates the earth, life, the world, and the skies because it improves his chances of survival, and it gives him an edge against his adversaries in the competition for the love of members of the opposite sex. Even the man having reached ecstasy from the race and the world may nonetheless still be slave to the play and life.

Ecstasy from the race and the yoke of the world is a first step, one that paves the way for another, ecstasy from the play and the yoke of life itself. This second step is nonetheless considerably more arduous than the first. To release the desire to appropriate nature, to possess and fabricate things already demands maturity and wisdom, but to release the instincts having driven life since its inception is far trickier. To cease from letting himself be driven to war, fighting against other parts of life to secure his daily sustenance means to accept the cold and dark embrace of death, detachment from life, willingly returning to the earth rather than cutting off the smallest shoot of the majestic tree of life. To let go of love is certainly the most difficult thing of all, not letting himself be controlled by his desire for communion with another being and to give birth to a new generation. Such ecstasy first requires that man perceives the nature of the tree of life, seeing how it keeps him a slave for its perpetuation

and extension, leading him astray from the path of appropriation of his being.

Contrary to the world, there is no temple within life in which man could take refuge, away from it, which would show him life from the point of view of death, what is not living. The best he can do is to know himself, to appropriate his own body, becoming mindful of the (hi)story of life concealed within each one of his body part, so that he may contemplate the whole of the tree of life and see himself as an object, reaching ecstasy from himself, his body and his ego, shattering the chains of the play and life keeping him prisoner of his instincts, bewitched by the whisper of life shaping his existence. The work preceding this volume, “The Tree of Life Within us – Origin and Evolution of Life, Philosophy of Nature, and Mindfulness of the Human Body,”⁵ was meant to represent a step in this direction, but liberation from the play and life does not imply their rejection or abandonment. What matters is the absence of attachment, the release, with the free man taking the lives of others or entering in communion with another being by choice rather than simply obeying the whisper of life, unwittingly playing his role in the play of love and war. Thus appropriating his own existence, appropriating being itself, man ceases to be a slave, but he does not become a master. A friend of being is what he becomes through ecstasy from life and the world, a being living for the appropriation of his existence, the experience of being, rather than serving forces larger than himself.

The appropriation of being certainly began soon after the first men rose up upon their feet, but the progress of the race for the appropriation of nature, the edification of the world, now more than ever allows ecstasy from the world and life. Man has himself built the tools allowing him to shatter the chains binding him to these realms, preventing him from appropriating being. Performed at the scale of mankind, such a liberation from the race for the appropriation of nature and the play of love and war, the yokes of the world and life, may perhaps become a prelude to a new stage of the evolution of life itself, just as the rise of man lead to an elevation of the world and a radical transformation of the face of the earth. If the play of love of war was the first stage of life, and the race for the appropriation of nature the second one, a third act may in the

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Cf. Bousquet, Antón. *The Tree of Life Within Us – Origin and Evolution of Life, Philosophy of Nature, and Mindfulness of the Human Body*

future be unfolded, perhaps resulting from a liberation of the masses from them, representing an adulthood of life, after a long period of gestation and maturation, with the tree of life patiently shaped by the play and the race, before the middle realm no longer has need of these skillful means, these tools allowing man to reach his destiny, a destiny that may significantly differ from the destiny of life and the one of the world, which appear to be mere perpetuation and propagation, while man is the only thing able to willingly embrace death, letting go of the driving force of life. Man himself, through his consciousness and his world, represents an ecstasy from the rest of all that *is*, including other parts of life and the whole of death, all the non-living things. Man stands out of the rest of being, as the being able to appropriate being itself, lauding the creation as he experiences the bliss of his transient existence, seeing both the refinement of the walls of things, the greatness of the earth below the world, the wondrous nature of the tree of life around him, and the majesty of the heavens, carried along the way to their destination.

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